

# 2023 IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2023)

The conference schedule is based on Istanbul Time  
December 5-8, 2023  
Istanbul, Turkey.

Registration Desk Location & Hours: Crystal Ballroom Foyer

Dec 4: 3:00-8:00PM

Dec 5: 7:30-5:00PM

Dec 6 8:00AM- 5:00PM

Dec 7: 8:00AM-5:00PM

Dec 8: 8:00AM-2:00PM

Wi-Fi Network : Hilton Honors Password: BIBM2023

Meeting Room, Restaurant	Floor
Globe Restaurant	M1
Crystal Ballroom	M1
MR 21	M2
MR 22	M2
MR 23	M2
MR 24	M2
MR 25A	M2
MR 25B	M2
MR 20	M2
MR 19	M2
MR 18	M2
MR 17	M2
MR 16	M2
MR 15	M2

Time	December 5, 2023
8:30am-12:30noon	<p>Workshops</p> <p>WS#1. The 4th International Workshop on Machine Learning for EEG Signal Processing (MLESP 2023) (MR21)</p> <p>WS#6. The 7th International Workshop on Deep Learning in Bioinformatics, Biomedicine, and Healthcare Informatics (DLB2H 2023) (Online)</p> <p>WS#8. Machine Learning and Artificial Intelligence in Bioinformatics and Medical Informatics (MABM2023) (MR23)</p> <p>WS#11. The 10th International Workshop on High Performance Computing on Bioinformatics (MR17)</p> <p>WS#14. Workshop on challenges and opportunities in Network Medicine and Multi-Omics bioinformatics' approaches for studying human complex disease (MR25A)</p> <p>WS#16. The 14th Integrative Data Analysis in Systems Biology (IDASB 2023) (MR25B)</p> <p>WS#21. Artificial Intelligence Techniques for BioMedicine and HealthCare (MR19)</p> <p>WS#25. 2023 CBEAS - Computational Microbial Biofilm Engineering and Applications workshop (2023 CBEAS) (MR18)</p>
Coffee Break (10:00-10:20am)	Coffee (M2)
Lunch Break	Lunch (12::20pm – 2:00pm) at your own
Afternoon Sessions I (2:00pm-6:30pm)	<p>Workshops</p> <p>WS#1. The 4th International Workshop on Machine Learning for EEG Signal Processing (MLESP 2023) (MR21)</p> <p>WS#3. 3rd Biomedical Informatics Applications in Translational Research and Rare Diseases (Online)</p> <p>WS#6. The 7th International Workshop on Deep Learning in Bioinformatics, Biomedicine, and Healthcare Informatics (DLB2H 2023) (Online)</p> <p>WS#8. Machine Learning and Artificial Intelligence in Bioinformatics and Medical Informatics (MABM2023) (MR24)</p> <p>WS#12. 2nd Workshop on Foundations of Network Analysis (MR23)</p> <p>WS#16. The 14th Integrative Data Analysis in Systems Biology (IDASB 2023) (MR25A)</p> <p>WS#17. Seventh Edition of Workshop of Processes and Algorithms for Healthcare and Life Quality Improvement (CBPBL 2023) (MR25B)</p> <p>WS#21. Artificial Intelligence Techniques for BioMedicine and HealthCare (MR19)</p> <p>WS#22. Artificial Intelligence &amp; Big Data vs Pandemics (MR18)</p> <p>WS#25. 2023 CBEAS - Computational Microbial Biofilm Engineering and Applications workshop (2023 CBEAS) (MR17)</p> <p>WS#27. Affective Computing and Health Care: new research and industrial perspectives (Affective-Health 2023) (Online)</p>
Coffee Break (4:00-4:20pm)	Coffee (M2)

Time	December 6
8:30-8:45am	<p>Opening Ceremony</p> <p>Nitin Agarwal, Reda Alhajj, Uffe Kock Wiil, Xingpeng Jiang, Mufti Mahmud, Nadia Pisanti, Haiying Wang, Xiaohua Tony Hu</p> <p>Location: Crystal Ballroom</p>
Keynote Sessions (8:45-9:45am)	<p>Keynote Talk: Prof. Guido Sanguinetti</p> <p>Title: Machine learning methods for single-cell 'omic data</p> <p>Chair: Jane Zheng</p> <p><a href="#">Location:</a> Crystal Ballroom</p>
Coffee Break (9:45-10:00am)	Coffee (Crystal Ballroom Foyer & M2)
10:00-12:00	Poster Setup (Crystal Ballroom Foyer)
Morning Sessions (10:00am-12:00pm)	<p>Session 1: Bioinformatics and Computational Biology of Molecular Structure, Function and Evolution (1)(MR21)</p> <p>Session 3: Next Generation Sequencing and High-throughput Methods (1) (MR23)</p> <p>Session 4: Cheminformatics and pharmacogenomics (1) (MR24)</p> <p>Session 5: Cross-Cutting Computational Methods and Bioinformatics of Disease (1) (MR25A)</p> <p>Session 8: Biomedical and Health Informatics (2) (Crystal Ballroom)</p>
8:30-12:30pm Workshop	<p>WS#1. The 4th International Workshop on Machine Learning for EEG Signal Processing (MLESP 2023) (MR18)</p> <p>WS#5. Net-AI-BHI The 2nd Workshop on Network Science and Artificial Intelligence for Biomedicine &amp; Health Informatics. (Net-AI-BHI 2023) (MR17)</p> <p>WS#8. Machine Learning and Artificial Intelligence in Bioinformatics and Medical Informatics (MABM2023) (MR15)</p> <p>WS#9. 14th International Workshop on High Performance Bioinformatics and Biomedicine (HiBB-2023) (MR16)</p> <p>WS#11. The 10th International Workshop on High Performance Computing on Bioinformatics (MR19)</p>
Lunch Break	<p>Lunch provided by Conference (12:30pm – 2:00pm)</p> <p>Location: Globe Restaurant</p>

Afternoon Sessions I (2:00pm-4:00pm)	<p>Session 9: Bioinformatics and Computational Biology of Molecular Structure, Function and Evolution (2)(MR21)</p> <p>Session 12: Cheminformatics and pharmacogenomics (2) (MR24)</p> <p>Session 13: Cross-Cutting Computational Methods and Bioinformatics of Disease (3) (MR25A)</p> <p>Session 14: Cross-Cutting Computational Methods and Bioinformatics of Disease (4) (MR25B)</p> <p>Session 15: Biomedical and Health Informatics (3) (MR20)</p> <p>Session 16: Biomedical and Health Informatics (4) (Crystal Ballroom)</p> <p>WS#8. Machine Learning and Artificial Intelligence in Bioinformatics and Medical Informatics (MABM2023) (MR15)</p> <p>WS#10. 4th Workshop on High Performance Computing Methods and Interdisciplinary Applications for Fighting the COVID-19 Pandemic (HPC4COVID-19 (MR17)</p> <p>WS#15. The 7th Workshop on Computational Methods for the Immune System Function (MR19)</p> <p>WS#20. 2023 Workshop on Artificial Intelligence for Biomarker Discovery (AI4BD 2023) (MR16)</p>
Coffee Break (4:00-4:15pm)	Coffee (M2)
(4:00-4:15pm)	Poster Display (Crystal Ballroom Foyer)
Afternoon Sessions II (4:15pm-6:00pm)	<p>Session 18: Computational Systems Biology (3) (MR22)</p> <p>Session 19: Cross-Cutting Computational Methods and Bioinformatics of Disease (5) (MR23)</p> <p>Session 20: Cross-Cutting Computational Methods and Bioinformatics of Disease (6) (MR24)</p> <p>Session 22: Cross-Cutting Computational Methods and Bioinformatics of Disease (8) (MR25B)</p> <p>Session 23: Biomedical and Health Informatics (5) (MR20)</p> <p>WS#1. The 4th International Workshop on Machine Learning for EEG Signal Processing (MLESP 2023) (MR18)</p> <p>WS#8. Machine Learning and Artificial Intelligence in Bioinformatics and Medical Informatics (MABM2023) (MR15)</p> <p>WS#10. 4th Workshop on High Performance Computing Methods and Interdisciplinary Applications for Fighting the COVID-19 Pandemic (HPC4COVID-19 (MR17)</p> <p>WS#15. The 7th Workshop on Computational Methods for the Immune System Function (MR19)</p> <p>WS#20. 2023 Workshop on Artificial Intelligence for Biomarker Discovery (AI4BD 2023) (MR16)</p>

Time	December 7
Keynote Sessions (8:45-9:45am)	<p>Keynote Talk: Prof. Xing-Ming Zhao</p> <p>Title : AI driven exploration of Microbiome</p> <p>Chair: Xingpeng Jiang</p> <p><u>Location:</u> Crystal Ballroom</p>

Coffee Break (9:45-10:00am)	Coffee (M2)
(9:45-10:00am)	Poster Display (Crystal Ballroom Foyer)
Morning Sessions (10:00am-12:00pm)	Session 27: Biomedical and Health Informatics (7)(MR23) Session 29: Biomedical and Health Informatics (9) (MR25A) Session 30: Biomedical and Health Informatics (10) (MR25B) Session 31: Biomedical and Health Informatics (11) (Crystal Ballroom) Session 32: Biomedical and Health Informatics (12) (MR20)
8:30-12:30pm Workshops	WS#4. Workshop on Long Non-Coding RNAs: Mechanism, Function, and Computational Analysis (BIBM-LncRNA 2023) (MR19) WS#5. Net-AI-BHI The 2nd Workshop on Network Science and Artificial Intelligence for Biomedicine & Health Informatics. (Net-AI-BHI 2023) (MR18) WS#13. Machine Learning for Biological and Medical Image Big Data (MR17) WS#23. 13th International Workshop on Biomedical and Health Informatics (MR15) WS#19. Artificial Intelligence Based Multimodal Medical Diagnosis (MR16) WS#26. The 14th International Workshop on Information Technology for Chinese Medicine (ITCM 2023) (Online)
Lunch Break	Lunch provided by conference (12:30pm – 2pm) Location: Globe Restaurant
(12:30-2pm)	Poster Display (Crystal Ballroom Foyer)
Afternoon Sessions I (2:00pm-4:00pm)	Session 33: Cross-Cutting Computational Methods and Bioinformatics of Disease (11)(MR21) Session 34: Cross-Cutting Computational Methods and Bioinformatics of Disease (12) (MR22) Session 35: Cross-Cutting Computational Methods and Bioinformatics of Disease (13) (MR23) Session 36: Biomedical and Health Informatics (13) (MR24) Session 38: Biomedical and Health Informatics (15) (MR25B) WS#4. Workshop on Long Non-Coding RNAs: Mechanism, Function, and Computational Analysis (BIBM-LncRNA 2023) (MR19) WS#13. Machine Learning for Biological and Medical Image Big Data (MR17) WS#23. 13th International Workshop on Biomedical and Health Informatics (MR15) WS#26. The 14th International Workshop on Information Technology for Chinese Medicine (ITCM 2023) (Online)
	<p style="text-align: center;"><b>Cruise Boat Tour and Banquet (4:30--9pm) - Meet at Lobby at 4pm for Shuttle Transfer to Cruise Boat.</b></p> <ol style="list-style-type: none"> <li>1. Brief Presentation on IEEE TCCLS Activities by Sicilia Rosa</li> <li>2. Best Papers, Best Student Papers Awards Chairs : PC Chairs</li> <li>3. Banquet Keynote speech Keynote Talk: Dr. Xiao-Zhong James Luo</li> </ol> <p style="text-align: center;">Title: The NHLBI Trans-omics for Precision medicine Program (TOPMed) – Stimulate innovative scientific discovery through multi-Omics and Inter-disciplinary approach</p>

	<p>Chair; Xiaohua Tony Hu Location: Tour Boat</p> <p>The tour company will arrange transportation from the conference hotels to the boat and then send the participants back to the hotels after the banquet</p>
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Time	December 8
Keynote Sessions (8:45-9:45am)	<p>Keynote Talk: Prof. Atilla Gürsoy Title: Unveiling complexity of signaling pathway and disease associations: Constructing and Exploring 3D Protein Interaction Networks Chair: Reda Alhajj <u>Location:</u> Crystal Ballroom</p>
Coffee Break (9:45-10:00am)	Coffee (M2)
(9:45-10:00am)	Poster Display (Crystal Ballroom Foyer)
Morning Sessions (10:00am-12:00pm)	<p>Session 42: Biomedical and Health Informatics (19) (MR22) Session 43: Biomedical and Health Informatics (20) (MR23) Session 44: Biomedical and Health Informatics (21) (MR24) WS#23. 13th International Workshop on Biomedical and Health Informatics (MR20) WS#26. The 14th International Workshop on Information Technology for Chinese Medicine (ITCM 2023) (Online)</p>
Lunch Break	<p>Lunch provided by the conference (12:30 – 2pm) Location: Globe Restaurant</p>

(12:30-2:00pm)	Poster Display (Crystal Ballroom Foyer)
Afternoon Sessions I (2:00pm-4:00pm)	<p>Session 46: Biomedical and Health Informatics (23) (MR21)</p> <p>Session 49: Biomedical and Health Informatics (25) (MR23)</p> <p>WS#23. 13th International Workshop on Biomedical and Health Informatics (MR20)</p> <p>WS#26. The 14th International Workshop on Information Technology for Chinese Medicine (ITCM 2023) (Online)</p>



## December 6: Morning Sessions (10am-12am)

### Session 1: Bioinformatics and Computational Biology of Molecular Structure, Function and Evolution (1)

Chair: Yan Yan

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R	B583 "Multimodal-AIR-BERT: A Multimodal Pre-trained Model for Antigen Specificity Prediction in Adaptive Immune Receptors" Yang Xiao, Yueshan Huang, Yu Zhao, Fan Xu, Qin Ren, Bing He, Jianhua Yao, and Xiao Liu
R	B320 "PESI: Paratope-Epitope Set Interaction for SARS-CoV-2 Neutralization Prediction" Zhang Wan, Zhuoyi Lin, Shamima Rashid, Shaun Yue-Hao Ng, Rui Yin, Jayavelu Senthilnath, and Chee-Keong Kwok
S	B1074 "Inference of subgenomes resulting from polyploid events using synteny based dynamic linking and maximum neighbourhood" Thulani Hewavithana, Chu Shin Koh, Avleen Kaur, Raymond Spiteri, Isobel Parkin, and Lingling Jin
S	B1702 "Genotype-to-Phenotype Associations with Frequented Region Variants" Indika Kahanda, Buwani Manuweera, Brendan Mumey, Thiruvarangan Ramaraj, Alan Cleary, and Joann Mudge
S	B264 "A multi-granularity information-enhanced pre-training method for predicting the coding potential of sORFs in plant lncRNAs" Shihao Xia, Jun Meng, Zhaowei Wang, Yu Wang, Haibin Li, Zhaojing Qin, and Yushi Luan
S	B645 "Combining Tags of Various Lengths Benefits Peptide Identification in Bottom-up Proteomics" Shengzhi Lai, Ning Li, and Weichuan Yu

### Session 3: Next Generation Sequencing and High-throughput Methods (1)

Chair: Xingpeng Jiang

Email: [xpjiang@mail.ccnu.edu.cn](mailto:xpjiang@mail.ccnu.edu.cn)

R	B554 "CLPiDA: A Contrastive Learning Approach for Predicting Potential PiRNA-Disease Associations" Xiaowen Hu, Yuanpeng Zhang, Jiaxuan Zhang, and Lei Deng
R	B650 "Data-driven trait heritability-based extraction of human facial phenotypes" Meng Yuan, Seppe Goovaerts, Hanne Hoskens, Stephen Richmond, Susan Walsh, Mark D. Shriver, John R. Shaffer, Mary L. Marazita, Seth M. Weinberg, Hilde Peeters, and Peter Claes
R	B288 "Coarse-to-fine Knowledge Graph Domain Adaptation based on Distantly-supervised Iterative Training" Wenxiong Liao, Zhengliang Liu, Yiyang Zhang, Xiaoke Huang, Fei Qi, Siqi Ding, Hui Ren, Zihao Wu, Haixing Dai, Sheng Li, Lingfei Wu, Ninghao Liu, Quanzheng Li, Tianming Liu, Xiang Li, and Hongmin Cai
S	B641 "A deep graph convolution network with attention for clustering scRNA-seq data" Xiang Chen, Junnan Yu, Li Peng, and Min Li
S	B2111 "Minimize Maximum Coverage of Fragment Alignment Selection" Yuyang Wang, Haodi Feng, Haitao Jiang, and Daming Zhu
S	B413 "GRAIGH: Gene Regulation accessibility integrating GeneHancer database" Lorenzo Martini, Roberta Bardini, Alessandro Savino, and Stefano Di Carlo

### Session 4: Cheminformatics and pharmacogenomics (1)

Chair: Zhongnan ZHANG

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R	B377 "Integrative Drug Discovery Platform: A Modular Approach for Efficient and Automated Virtual Screening"
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	Tianci Li, Lulu Xie, Zhonghai Zhang, Xu Li, Bo Duan, Gang Niu, Shiwei Sun, Fa Zhang, Runtong Zhang, Guangming Tan, and Chunming Zhang
R	B2101 "MGDTI: Meta-Learning Based Graph Transformer for Drug-Target Interaction Prediction" Zhenjiang Zhao, Chengxin He, Yuening Qu, Huiru Zheng, Lei Duan, and Jie Zuo
R	B262 "DrugProtKGE: Weakly Supervised Knowledge Graph Embedding for Highly-Effective Drug-Protein Interaction Representation" Yan-Long Qiu, Si-Qi Wang, Xi Yang, Xin-Yuan Qiu, Cheng-Kun Wu, Ying-Bo Cui, and Can-Qun Yang
S	B379 "TF-DTA: A Deep Learning Approach Using Transformer Encoder to Predict Drug-Target Binding Affinity" WENJUN LI, YIQIANG ZHOU, and XIWEI TANG
S	B976 "Enhancing Drug Repositioning through Contrast Learning and Denoised Negative Sampling" Kunyu Ni, Rongkang Xu, Yu Huang, and Xiaomei Wei
S	B1004 "SEDGCN: Sentiment Enhanced Dual Graph Convolutional Networks for Detecting Adverse Drug Reactions" yunzhi qiu, xiaokun zhang, weiwei wang, youlin wu, bo xu, and Hongfei Lin

#### Session 5: Cross-Cutting Computational Methods and Bioinformatics of Disease (1)

Chair: Julio Facelli

Email: [julio.facelli@utah.edu](mailto:julio.facelli@utah.edu)

R	B257 "Selecting Heterogeneous Features Based on Unified Density-Guided Neighborhood Relation for Complex Biomedical Data Analysis" Lang Zhao, Yiqun Zhang, Xiaopeng Luo, Yue Zhang, Yiu-ming Cheung, and Kangshun Li
R	B290 "Predicting miRNA-disease associations based on graph convolutional network with path learning" Shuang Chu, Guihua Duan, and Cheng Yan
R	B636 "Identifying Main and Epistasis Effects of Genetic Variations on Neuroimaging Phenotypes Using Effective Feature Interaction Learning" Jin Zhang, Qiang Xie, Muheng Shang, Duo Xi, Minjianan Zhang, Lei Guo, and Lei Du
S	B232 "CSNet: Colonic Polyp Segmentation for Assisted Diagnosis in Colonoscopy" Jianbo Zhu, Zhaoxu Han, Zhimin Chang, Mingfeng Ge, Ruogian Gao, and Wenfei Dong
S	B916 "Imputing time-series microbiome abundance profiles with diffusion model" Misato Seki, Yao-zhong Zhang, and Seiya Imoto

#### Session 8: Biomedical and Health Informatics (2)

Chair: Bingjun Li

Email: [bingjun.li@uconn.edu](mailto:bingjun.li@uconn.edu)

R	B700 "Histopathological Cancer Detection with Topological Signatures" Ankur Yadav, Faisal Ahmed, Ovidiu Daescu, Reyhan Gedik, and Baris Coskunuzer
R	B1042 "A multi-view comparative learning method for spatial transcriptomics data clustering" Wei Peng, Zhihao Zhang, Wei Dai, Xiaodong Fu, Li Liu, Lijun Liu, and Ning Yu
R	B498 "Exploring Brain Connectivity with Spatial-Temporal Graph Neural Networks for Improved EEG Seizure Analysis" Junfeng Xie, Dafang Zhang, and Wei Li
S	B548 "Competitive Ensembling Teacher-Student Framework for Semi-Supervised Left Atrium MRI Segmentation" Yuyan Shi, Yichi Zhang, and Shasha Wang
S	B703 "GroupSeg: An Efficient Grouping Transformer Network for Polyp Segmentation" Mingwen Zhang, Haiying Xia, and Yumei Tan
S	B713 "DR-ConvNeXt: A Dilated Residual Network based on ConvNeXt for Lung Nodule Features Prediction" Zehao Qi, GuoWei Tao, Feng Liu, Hao Gui, Wen Cai Huang, and Jia Ni Zou

## December 6: Afternoon Sessions I (2pm-4pm)

### Session 9: Bioinformatics and Computational Biology of Molecular Structure, Function and Evolution (2)

Chair: Hanqing Zhao

Email: [h.zhao-1@utwente.nl](mailto:h.zhao-1@utwente.nl)

R	B676 "Enhancing Protein Solubility Prediction through Pre-trained Language Models and Graph Convolutional Neural Networks" jie chen, Yurong Qian, Zhijian Huang, and Lei Deng
R	B694 "DyNRW: Time-Series Dynamical Networks for Identifying HCC-Related Genes" Jin A, Ju Xiang, and Min Li
R	B834 "Protein function prediction using graph neural network with multi-type prior biological knowledge" Yunyan Shuai, Wenkang Wang, Yiming Li, Min Zeng, and Min Li
R	B783 "Deep Learning boosted amyloidosis diagnosis" Shaokai Wang and Bin Ma
S	B2106 "DARE: Sequence-Structure Dual-Aware Encoder for RNA-Protein Binding Prediction" Luhan Shen, Chengxin He, Yuening Qu, Huiru Zheng, and Lei Duan
S	B1068 "PEST: A General-Purpose Protein Embedding Model for Homology Search" Yongchang Liu, Peiying Li, Shikui Tu, and Lei Xu

### Session 12: Cheminformatics and pharmacogenomics (2)

Chair: Abdullah Hamadullah

Email: [azeemi.1981@gmail.com](mailto:azeemi.1981@gmail.com)

R	B2121 "ADMEOOD: Out-of-Distribution Benchmark for Drug Property Prediction" Shuoying Wei, Xinlong Wen, Songquan Li, Lida Zhu, and Rongbo Zhu
R	B1060 "Improving efficiency in rationale discovery for Out-of-Distribution molecular representations" Jiahui Zhang, Wenjie Du, Di Wu, Jiahe Li, Shuai Zhang, and Yang Wang
R	B684 "Predicting Associations between circRNAs and Drug Sensitivity using Heterogeneous Graphs and Graph Attention Networks" Xiaojun Xiao, Yurong Qian, Zhijian Huang, Rongtao Zheng, and Lei Deng
S	B888 "PandoraRLO: Unveiling Protein-Ligand Interactions with Reinforcement Learning for Optimized Pose Prediction" Justin Jose, Ujjaini Alam, Divye Singh, and Pooja Arora
S	B2103 "GEP-DL4Mol: A Novel Molecular Deep-learning Model Optimization Framework for Boosting Molecular Properties Prediction" Yuzhong Peng, Hao Zhang, Ziqiao Zhang, Shuigeng Zhou, and Shaojie Qiao
S	B428 "A computational framework for personalized cancer drug response prediction based on deep transfer learning from combined denoised genomic profiles and chemical structure embedding of drugs" Yuchen Zhang, Linghang Lian, and Xuhua Yang

### Session 13: Cross-Cutting Computational Methods and Bioinformatics of Disease (3)

Chair: Xulong Wang

Email: [xl.wang@sheffield.ac.uk](mailto:xl.wang@sheffield.ac.uk)

R	B769 "HyperScore: A unified measure to model hypertension progression using multi-modality measurements and semi-supervised learning" Mohamad Alkhodari, Winok Lapidaire, Zhaohan Xiong, Turkay Kart, Yasser Iturria-Medina, Leontios Hadjileontiadis, Ahsan Khandoker, Adam Lewandowski, Abhirup Banerjee, and Paul Leeson
R	B251 "Privacy-Preserving Publishing of Individual-Level Medical Data for Cloud Services" Ho Bae, Heonseok Ha, and Siwon Kim
R	B1026 "MVP: Optimizing Multi-view Prompts for Medical Dialogue Summarization" Jiaxin Duan, Fengyu lu, and Junfei Liu

R	B396 "HC-MAE: Hierarchical Cross-attention Masked Autoencoder Integrating Histopathological Images and Multi-omics for Cancer Survival Prediction" Suixue Wang, Xiangjun Hu, and Qingchen Zhang
S	B1384 "Spatio-temporal Similarity Measure based Multi-Task Learning for Predicting Alzheimer's Disease Progression using MRI data" Xulong Wang, Yu Zhang, Menghui Zhou, Tong Liu, Jun Qi, and Po Yang
S	B453 "pCCI: A machine learning patient-centric cell-cell interactions framework for cancer subtype classification" Pantelis Papageorgiou, Aigli Korfiati, Aristotelis Misios, Aristidis G. Vrahatis, Alexandros Pittis, Bogdan Tanasa, Konstantinos Mavrommatis, Yilin Zhao, Tao Yang, and Vassilis Pitsikalis

#### Session 14: Cross-Cutting Computational Methods and Bioinformatics of Disease (4)

Chair: Kivanc Kok

Email: [guvanch@medipol.edu.tr](mailto:guvanch@medipol.edu.tr)

R	B315 "Biomedical Named Entity Recognition Through Deep Reinforcement Learning" Zhehuan Zhao, Yuying Zou, Menghan Wang, Bo Xu, Zhihao Yang, and Hongfei Lin
R	B336 "Multi-omics Sampling-based Graph Transformer for Synthetic Lethality Prediction" Xusheng Zhao, Hao Liu, Qiong Dai, Hao Peng, Xu Bai, and Huailiang Peng
S	B950 "Topic-BiGRU-U-Net for Document-level Relation Extraction from Biomedical Literature" Yali Zhao and Rong Yan
S	B370 "Cervical Cytology Classification with Coarse Labels Based on Two-Stage Weakly Supervised Contrastive Learning Framework" Siyi Chai, Jingmin Xin, Jiayi Wu, Hongxuan Yu, Zhaohai Liang, Yong Ma, and Nanning Zheng
S	B688 "PACS: Prediction and analysis of cancer subtypes from multi-omics data based on a multi-head attention mechanism model" Liangrui Pan, Dazheng Liu, Zhichao Feng, Wenjuan Liu, and Shaoliang Peng
S	B2036 "Identification of Important SNPs using Bayesian Deep Learning on Whole-Genome Arabidopsis Thaliana Data" Nikita Kohli, Javed Tomal, and Yan Yan
S	B2045 "Active Learning Framework for Cost-Effective TCR-Epitope Binding Affinity Prediction" Pengfei Zhang, Seojin Bang, and Heewook Lee

#### Session 15: Biomedical and Health Informatics (3)

Chair: Zhijin Wu

Email: [zhijin\\_wu@brown.edu](mailto:zhijin_wu@brown.edu)

R	B442 "START: Automatic Sleep Staging with Attention-based Cross-modal Learning Transformer" Jingpeng Sun, Rongxiao Wang, Gangming Zhao, Chen Chen, Yixiao Qu, Jinpeng Li, Xiyuan Hu, and Yizhou Yu
R	B450 "Learning RNA sequence patterns to interpretably identify m6A modification sites" Guodong Li, Bowei Zhao, Xiaorui Su, Yue Yang, Pengwei Hu, and Lun Hu
R	B1073 "Diffusion-Enhanced Graph Attention Network for Cancer Type Classification" Xiaofeng Wang, Jiahao Zhang, and Jianyu Zhou
S	B2032 "Sequential Representation of Sparse Heterogeneous Data for Diabetes Risk Prediction" Rochana Chaturvedi, Mudassir Rashid, Brian Layden, Andrew Boyd, Ali Cinar, and Barbara Di Eugenio
S	B265 "Emotion Recognition based on Physiological Signals Multi-head Attention Contrastive Learning" Yunfei Guo, Tao Zhang, and Wu Huang

S	B726 "ScribblePolyp: Scribble-Supervised Polyp Segmentation through Dual Consistency Alignment" Zixun Zhang, Yuncheng Jiang, Jun Wei, Hannah Cui, and Zhen Li
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#### Session 16: Biomedical and Health Informatics (4)

Chair: Weizhong Zhao

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R	B1021 "Enhancing Precision and Interpretability of CT Image Reconstruction via Self-supervised Adaptive Domain Transformation" Baiyin Huang, Guoqiang Xiao, and Xiaoqin Tang
R	B1050 "A Deep Learning Method with Multi-view Attention and Multi-branch GCN for BECT Diagnosis" Lin Zhang, Yun Ren, Fang Yuan, Yangxin Zhu, Shikui Tu, Yucai Chen, and Lei Xu
R	B1057 "Explainable Depression Recognition from EEG Signals via Graph Convolutional Network" Jian Shen, Jiaying Chen, Yu Ma, Zheyu Cao, Yanan Zhang, and Bin Hu
S	B286 "Exploring Early Stress Detection from Multimodal Time Series with Deep Reinforcement Learning" Leonardo Furia, Matteo Tortora, Paolo Soda, and Rosa Sicilia
S	B862 "Biomedical Entity and Relation Extraction Based on Triple Region Vertices" Yuqi Liu, Zhihao Yang, Jinzhong Ning, Yin Zhang, Wei Liu, Hongfei Lin, and Jian Wang
S	B563 "Prediction of piRNA-mRNA interactions based on an interactive inference network" Yajun Liu, Ru LI, Aimin Li, Rong Fei, Xie Guo, and Fang-Xiang Wu
S	B562 "Imputing single-cell RNA-seq data by graph autoencoder with multi-kernel" Kang Jiang, Bo Liao, Petros Papagerakis, and FangXiang Wu

## December 6: Afternoon Sessions II (4:15pm-6pm)

#### Session 18: Computational Systems Biology (3)

Chair: Tianhai Tian

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R	B917 "SLPFA: Protein Structure-Label Embedding Attention Network for Protein Function Annotation" Qiang Zhang, Juan Liu, Feng Yang, Zhihui Yang, and Jing Feng
R	B902 "Predicting Microbe-Metabolite Interactions by Integrating Non-negative Matrix Factorization and Generative Network" Yi Jia, Shanshan Zheng, Tingting He, and Xingpeng Jiang
R	B2099 "A flexible gene regulatory network reconstruction method based on autoencoder and graph attention network"
S	B870 "Predicting Tumor Mutation Burden of Lung Cancer Based on Residual Network" Xiangfu Meng, Chunlin Yu, and Xiaoyan Zhang
S	B573 "Parallel Computation of Conformational Stability for CD4+ T-cell Epitope Prediction" Avik Bhattacharya, James Wrabl, Samuel Landry, and Ramgopal Mettu
S	B2056 "Transfer learning Classification Algorithm by Exploiting Multi-source Adaptation and Similarity of omic data" Tao Yang, Minghua Wang, and Xiaoke Ma
S	B762 "The Construction of Sparse Probabilistic Boolean Networks: A Discrete Perspective" Christopher H. Fok, Wai-Ki Ching, and Chi-Wing Wong

#### Session 19: Cross-Cutting Computational Methods and Bioinformatics of Disease (5)

Chair: Thiru Ramaraj

Email: [tramaraj@depaul.edu](mailto:tramaraj@depaul.edu)

R	B356 "Diffusing Coupling High-Frequency-Purifying Structure Feature Extraction for Brain Multimodal Registration" Fan Gao, Yuanbo He, Shuai Li, Aimin Hao, and Desen Cao
R	B357 "Multi-Kernel Tensor Fusion on Grassmann Manifold for Genomic Data Clustering" Fei Qi, Junyu Li, Yi Liao, Wenxiong Liao, Jiazhou Chen, and Hongmin Cai
R	B361 "Exploring Post-Training Quantization of Protein Language Models" Shuang Peng, Fei Yang, Ning Sun, Sheng Chen, Yanfeng Jiang, and Aimin Pan
S	B296 "Class-specific Prompts in Vision Transformer for Continual Learning of New Diseases" Defeng Zhao, Zejun Ye, Weishi Zheng, and Ruixuan Wang
S	B326 "MoSCHG: Multi-omics Single-cell Classification based on Heterogeneous Graphs and Supervised Contrastive Learning" Xinjian Chen, Chenyang Xie, Yunhao Zhang, Song He, Xiaochen Bo, and Zhongnan Zhang
R	B2019 "Ulcerative Colitis Mayo Endoscopic Scoring Classification with Active Learning and Generative Data Augmentation" Ümit Mert Çağlar, Alperen İnci, Oğuz Hanoğlu, Gökem Polat, and Alptekin Temizel

#### Session 20: Cross-Cutting Computational Methods and Bioinformatics of Disease (6)

Chair: Mehmet Kaya

Email: [mkaya.tr76@gmail.com](mailto:mkaya.tr76@gmail.com)

R	B774 "Accurate Detection of MicroRNAs from NanoString nCounter with a Latent Mixture Model" Chang Yu and Zhijin Wu
R	B230 "Self-supervise learning for atrial fibrillation detection with CNNTransformer" Congyu Zou, Alexander Müller, Eimo Martens, Phillip Müller, Daniel Rückert, Alexander Steger, Matthias Becker, and Utschick Wolfgang
R	B1100 "EdtClust: A fast homologous protein sequences clustering method based on edit distance" Yixin Xiang, Jiachang Gu, and Jianyu Zhou
S	B2127 "miRNA-Disease Association Prediction based on Heterogeneous Graph Transformer with Multi-view similarity and Random Auto-encoder" Yinbo Liu, Xiaodi Yan, Jun Li, Xinxin Ren, Qi Wu, Gang-ao Wang, Yuqing Chen, and Xiaolei Zhu
S	B400 "Real-time Neuron Segmentation for Voltage Imaging" Yosuke Bando, Ramdas Pillai, Atsushi Kajita, Farhan Abdul Hakeem, Yves Quemener, Hua-an Tseng, Kiryl Piatkevich, Changyang Linghu, Xue Han, and Edward Boyden
R	B2100 "SIDE: Sequence-Interaction-Aware Dual Encoder for Predicting circRNA Back-Splicing Events" Chengxin He, Lei Duan, Huiru Zheng, Yuening Qu, and Zhenyang Yu

#### Session 22: Cross-Cutting Computational Methods and Bioinformatics of Disease (8)

Chair: Chengxin He

Email: [cxinhe@foxmail.com](mailto:cxinhe@foxmail.com)

R	B2107 "VirusBERTHP: Improved Virus Host Prediction Via Attention-based Pre-trained Model Using Viral Genomic Sequences" Yunzhan Wang, Jin Yang, and Yunpeng Cai
R	B2067 "Multi-omics clustering based on interpretable and discriminative features for cancer subtyping" Tianyi Shi, Xiucui Ye, and Tetsuya Sakurai
R	B649 "UMINT-FS: UMINT-guided Feature Selection for multi-omics datasets" Chayan Maitra, Dibyendu B. Seal, Vivek Das, Yevgeniy Vorobeychik, and Rajat K. De
S	B1023 "Towards Efficient Medical Dialogue Summarization with Compacting-Abstractive Model" Jiaxin Duan, Fengyu lu, and Junfei Liu
S	B2115 "Transformer-Based Domain Adaptation for Multi-Modal Emotion Recognition in Response to Game Animation Videos"



	Jingyi-Yi Liu, Jia-Wen Liu, Wei-Long Zheng, and Bao-Liang Lu
S	B2010 "Effect of Chronic unpredictability stress to thymus by RNA-seq" Yan Wang, Ruyi Zhang, XiuQing Xu, Ying Xie, and Min Zhao

#### Session 23: Biomedical and Health Informatics (5)

Chair: Mufti Mahmud

Email: [mufti.mahmud@ntu.ac.uk](mailto:mufti.mahmud@ntu.ac.uk)

R	B468 "Vision Transformers(ViT) Pretraining on 3D ABUS Image and Dual-CapsViT: Enhancing ViT Decoding via Dual-Channel Dynamic Routing" Mingwang Xu, Wei Wang, Kuanquan Wang, Suyu Dong, and Gongning Luo
R	B1077 "Group Attention-based Multi-wave Graph Learning for Dementia Diagnosis" Jiaxin Wei, Bin Jiao, Xu Tian, Lu Shen, and Jin Liu
R	B491 "Fusing Local-Global Facial Features by NFFT for Automatic Depression Estimation" Tianfei Ling, Deyuan Chen, Tingshao Zhu, and Baobin Li
S	B351 "Semantic-guided unknown-aware Rare Disease Diagnosis" Yiwen Luo and Yixuan Yuan
S	B861 "Multimodal reasoning for nutrition and human health via knowledge graph embedding" Chengcheng Fu, Yanan Yao, Jieyu Wu, Weizhong Zhao, Tingting He, and Xingpeng Jiang
S	B534 "Multi-modal Contrastive-Generative Pre-training for Fine-grained Skin Disease Diagnosis" Liangdi Ma, Jun Zhao, Guoxin Wang, Yuchen Guo, and Feng Xu

### December 7: Morning Sessions (10am-12am)

#### Session 27: Biomedical and Health Informatics (7)

Chair: Kyungsook Han

Email: [khan@inha.ac.kr](mailto:khan@inha.ac.kr)

R	B483 "Improving Medical Image Denoising via a Lightweight Plug-and-play Module" Lei Ma, Hulin Kuang, Jin Liu, Chengchao Shen, and Jianxin Wang
S	B2052 "Diurnal Pain Classification in Critically Ill Patients using Machine Learning on Accelerometry and Analgesic Data" Jessica Sena, Sabyasachi Bandyopadhyay, Andrea Davidson, Ziyuan Guan, Jesimon Bareto, Tezcan Ozrazgat-Baslanti, Patrick Tighe, Azra Bihorac, William Schwartz, and Parisa Rashidi
S	B515 "What will regularized continuous learning performs if it was used to medical image segmentation: a preliminary analysis" Weihaio Dai, Chaolu Feng, Shuaizheng Chen, Wei Li, Jinzhu Yang, and Dazhe Zhao
S	B466 "Deep-USIpred: identifying substrates of ubiquitin-protein ligases E3 and deubiquitinases with pretrained protein embedding and bayesian neural network" Jia Wang, Gui-Qing Pan, Jian-Qiang Li, Xue-Qun Shang, Zhu-Hong You, and Yu-An Huang
S	B495 "Towards Modeling Human Biorhythms Using Non-Invasive Approaches" Kapotaksha Das, Mohamed Abouelenien, Mihai Burzo, John Elson, Ali Hassani, and Clay Maranville
S	B2088 "GCS-ICHNet: Assessment of Intracerebral Hemorrhage Prognosis using Self-Attention with Domain Knowledge Integration" Xuhao Shan, Xinyang Li, Ruiquan Ge, Shibin Wu, Ahmed Elazab, Jichao Zhu, Lingyan Zhang, Gangyong Jia, Qingying Xiao, Xiang Wan, and Changmiao Wang

#### Session 29: Biomedical and Health Informatics (9)

Chair: Pengwei Hu

Email: [hpw@ms.xjb.ac.cn](mailto:hpw@ms.xjb.ac.cn)

R	B912 "Enhancing Clinical Outcome Predictions through Auxiliary Loss and Sentence-Level Self-Attention" Sanghoon Lee, Gwanghoon Jang, Chanhwi Kim, Sejeong Park, Kiwoong Yoo, Jihye Kim, Sunkyu Kim, and Jaewoo Kang
R	B518 "DFNodule: a Novel Deformable Faster R-CNN for Lung Nodule Detection" guowei Tao, fu Zhou, Feng Liu, and Hao Gui
R	B519 "Simultaneous Super-Resolution and Denoising on MRI via Conditional Stochastic Normalizing Flow" Zhenhong Liu, Xingce Wang, Zhongke Wu, Yicheng Zhu, and Alejandro F Frangi
S	B2005 "DCA: Densely Cross-scale Attention Network for Anatomically-plausible Medical Image Segmentation" Yang Ning, Dawei Wang, Tianming Tan, and Caiming Zhang
R	B985 "Identifying Disease-related brain Imaging Quantitative Traits and Related Genetic Variations via A Bidirectional Association Learning Method" Muheng Shang, Yan Yang, Minjianan Zhang, Jin Zhang, Duo Xi, Lei Guo, and Lei Du

#### Session 30: Biomedical and Health Informatics (10)

**Chair:** Liang Zhao

**Email:** [liangzhao@dlut.edu.cn](mailto:liangzhao@dlut.edu.cn)

R	B2055 "Synthesize More Diverse and Realistic Nanoparticle Image-mask Pairs on Limited Data" Wenlong Li, Chaohui Liu, Jingchuan Fan, Guoqiang Xiao, and Xiaoqin Tang
R	B2087 "Pretrain Once and Finetune Many Times: How Pretraining Benefits Brain MRI Segmentation" Hao Zhang, Sheng Xu, Wei Ren, HuPing Ye, and Yi Hong
R	B213 "AVS-Net: Attention-based Variable Splitting Network for P-MRI Acceleration" Yue Zhang, Jing Li, Zigan Wang, Jinming Duan, and Jinliang Li
R	B975 "Rethinking Low-Dose CT Synthesis: Degrading Normal-Dose CT from Origin for Pairwise Training of CT Denoiser" lianying chao, Taotao Zhang, Yanli Wang, wenqi shan, qiang li, and zhiwei wang
S	B940 "Self-supervised Distillation and Multi-scale Network for Parkinson's Disease Classification" Haijun Lei, Chengjia Liang, Yuchen Zhang, Shuyuan lei, and Baiying Lei

#### Session 31: Biomedical and Health Informatics (11)

**Chair:** Hao Xie

**Email:** [carry-h.xie@connect.polyu.hk](mailto:carry-h.xie@connect.polyu.hk)

R	B687 "CVFC: Attention-Based Cross-View Feature Consistency for Weakly Supervised Semantic Segmentation of Pathology Images" Liangrui Pan, Lian Wang, Zhichao Feng, Liwen Xu, and Shaoliang Peng
R	B685 "LDCSF: Local depth convolution-based Swim framework for classifying multi-label histopathology images" Liangrui Pan, Yutao Dou, Zhichao Feng, Liwen Xu, and Shaoliang Peng
R	B662 "A Structure-Affinity Dual Attention-based Network to Segment Spine for Scoliosis Assessment" Hao Xie, Zixun Huang, Frank H. F. Leung, Yakun Ju, Yong-Ping Zheng, and Sai Ho Ling
R	B2073 "Personalized federated adaptive regularization for heterogeneous medical image classification: COVID-19 CT results" Yuan Liu, Zhe Qu, Shu Wang, Tao Sheng, Xiaoqing Yu, and Jianxin Wang
S	B2084 "Generating Twin VFs of Unlabeled and Unpaired VF through Generative Model" Zhenyu Zhang and Haogang Zhu
R	B616 "Effective Data Preprocessing Techniques for CNN-based Selective Sweep Detection" Hanqing Zhao and Nikolaos Alachiotis

#### Session 32: Biomedical and Health Informatics (12)

**Chair:** Haider Raza



Email: [h.raza@essex.ac.uk](mailto:h.raza@essex.ac.uk)

R	B914 "Integrating Automated Knowledge Extraction with Large Language Models for Explainable Medical Decision-Making" Haodi Zhang, Jiahong Li, Yichi Wang, and Yuanfeng Song
R	B933 "Counterfactual Inference-based Data Augmentation for Drug-side effect Associations Prediction" Wenjie Yao, Weizhong Zhao, Xiaowei Xu, Xingpeng Jiang, Xianjun Shen, and Tingting He
R	B521 "MLLCD: A Meta Learning-based Method for Lung Cancer Diagnosis Using Histopathology Images" Xiangjun Hu, Suixue Wang, Hang Li, and Qingchen Zhang
S	B455 "Detection of Symptoms of Depression Using Data From the iPhone and Apple Watch" Samir Akre, Zachary D. Cohen, Amelia Welborn, Tomsilav D. Zbozinek, Brunilda Balliu, Jonathan Flint, Alex A.T. Bui, and Michelle G. Craske
S	B1086 "An Improved Vision-Transformer Network for Skin Cancer Classification" Gayathri Mol Shajimon, Isreal Ufumaka, and Haider Raza
S	B850 "Protein Function Prediction with Primary-Tertiary Hierarchical Learning" Arnold Kazadi, Ming Zhang, and Jingbo Zhou

## December 7: Afternoon Sessions I (2pm-4pm)

Session 33: Cross-Cutting Computational Methods and Bioinformatics of Disease (11)

Chair: Sleiman Alhajj

Email: [srelhajj@gmail.com](mailto:srelhajj@gmail.com)

R	B646 "Adaptive particle swarm architecture search based on multi-level convolutions for functional brain network classification" Xingyu Wang and Junzhong Ji
R	B930 "Effective Drug Repositioning with a Novel Negative Sample Selection Algorithm" Shengwei Ye, Weizhong Zhao, Xiaowei Xu, Xianjun Shen, Xingpeng Jiang, and Tingting He
R	B443 "TCSIoT: Text Guided 3D Context and Slope Aware Triple Network for Dental Implant Position Prediction" Xinquan Yang, Jinheng Xie, Xuechen Li, Xuguang Li, Linlin Shen, and Yongqiang Deng
S	B683 "An Effective Microbial-drug Relation Extraction Model Based on Dual Graph Convolutional Networks" Ruizhe Zhang, Dandan Li, Ying Xiao, Weizhong Zhao, Xingpeng Jiang, and Xianjun Shen
S	B327 "Drug-target and Drug-disease Association Prediction based on Drug-target-disease Network and Multi-task Learning" Binyu Wang, Yunhao Zhang, Hongyan Ye, Lianlian Wu, Song He, Xiaochen Bo, and Zhongnan Zhang
S	B788 "Low-Resource Efficient Multi-Stage Tuning Strategy for Biomedical Question Answering Task" Binrui Wang, Yongping Du, Xingnan Jin, Rui Yan, and Qi Zhang

Session 34: Cross-Cutting Computational Methods and Bioinformatics of Disease (12)

Chair: Özge ŞENSOY

Email: [osensoy@medipol.edu.tr](mailto:osensoy@medipol.edu.tr)

R	B764 "Automatic Detection of Sleep Spindles and its Application in Patients with Acute Disorders of Consciousness" Zhenglang Yang and Jiahui Pan
R	B796 "AMTL-RFC: A multi-task learning based method for evaluating the feasibility of enzymatic reactions" Jianghang Liu, Juan Liu, Zhihui Yang, Feng Yang, and Qiang Zhang

R	B506 "LI-FPN: Depression and Anxiety Detection from Learning and Imitation"
R	B988 "Enhancing Cancer Gene Prediction through Aligned Fusion of Multiple PPI Networks Using Graph Transformer Models" Zebei Han and Yang Yang
S	B1094 "Pathological Tissue-level Contour Genomic Profile Interpretation of Lung Adenocarcinoma via Spatial and Morphological Features Co-action Graph Neural Network" Yu Yu, Wen Shi, Guoxi Xie, and Jianing Xi

Session 35: Cross-Cutting Computational Methods and Bioinformatics of Disease (13)

Chair: Xiufen Zou

Email: [xfzou@whu.edu.cn](mailto:xfzou@whu.edu.cn)

R	B924 "An Effective Model for Drug-Drug Interactions Prediction in Cold-start Scenario via Counterfactual Data Augmentation" Xueling Yuan, Weizhong Zhao, Xiaowei Xu, Xinhui Tu, Xingpeng Jiang, and Tingting He
R	B951 "Isoform Function Prediction Based on Heterogeneous Graph Attention Networks" Kuo Guo, Yifan Li, Hao Chen, Hong-Bin Shen, and Yang Yang
R	B804 "M2-DIA: Enhancing Diagnostic Capabilities in Imbalanced Disease Data using Multimodal Diagnostic Ensemble Framework" Chan-Yang Ju, Ji-Sung Park, and Dong-Ho Lee
R	B475 "A Fully Automated CT-Guided Learning for Survival Prediction of Esophageal Cancer" Hailin Yue, Hulin Kuang, Jin Liu, Jianhong Cheng, Junjian Li, and Jianxin Wang
R	B744 "MLGL: Model-free Lesion Generation and Learning for Diabetic Retinopathy Diagnosis" Jiajia Li, Chenhao Lin, Zikai Wang, Haitao Song, Feng Tan, Lun Hu, and Pengwei Hu

Session 36: Biomedical and Health Informatics (13)

Chair: Baris Coskunuzer

Email: [coskunuz@utdallas.edu](mailto:coskunuz@utdallas.edu)

R	B1038 "Deep k-Space Partition-Based Pyramid Networks for Fast Multimodal MRI Reconstruction Guided by Multiscale Reference Modality" Xiao-Xin Li, Wen-Hao Zheng, Qianwei Zhou, and Lei Chen
R	B786 "Identification of ASD via Graph Convolutional Network with Visual Semantic Encoding of Saccade" Chen Xia, Hexu Chen, Xinran Guo, Kuan Li, and Shuai Ren
R	B858 "A novel few-shot learning approach for the classification of histological images of neuroblastoma" Bo Xu, Qirui Wang, Longjiao Li, Ruiyuan Wang, and Hongfei Lin
S	B732 "Spatio-Temporal Swin Transformer-based 4-D EEG Emotion Recognition" Zongnan Chen, Jiarui Jin, and Jiahui Pan
S	B255 "Deep Adversarial Network Based Stain Unmixing for Brightfield Multiplex Immunohistochemistry Images" Siyuan Xu, Guannan Li, Mingxue Gu, and Qingli Li

Session 38: Biomedical and Health Informatics (15)

Chair: Mufti Mahmud

Email: [mufti.mahmud@ntu.ac.uk](mailto:mufti.mahmud@ntu.ac.uk)

R	B717 "Semi-supervised Medical Image Segmentation via Feature-perturbed Consistency" Yang Yang, Ruixuan Wang, Tong Zhang, and Jingyong Su
R	B738 "Leveraging Frequency Domain Learning in 3D Coronary Segmentation" Xinyuan Wang, Chengwei Pan, Hongming Dai, Gangming Zhao, Jinpeng Li, Xiao Zhang, and Yizhou Yu

R	B693 "SCTransNet: 3D Medical Image Segmentation Model Based on the Fusion of CNN and Transformer" Yongchang Jia, Guihua Duan, and Yu Sheng
S	B943 "Cervical OCT Image Synthesis via Noise Adaptation Diffusion Models" Yuxuan Xiong, Yimin Luo, Qian Tang, Yan Zhang, and Bo Du
S	B348 "Bézier Curves Meet Deep Learning: A Novel Pretraining Method for Improved and Generalized Retinal Vessel Segmentation" Luyu Niu, Xiaojuan Chen, and Song Guo
S	B2033 "scGEMOC, A Graph Embedded Contrastive Learning Single-cell Multiomics Clustering Model" Bingjun Li and Sheida Nabavi

## December 8: Morning Sessions (10am-12am)

### Session 42: Biomedical and Health Informatics (19)

Chair: Mufti Mahmud

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R	B953 "Diff-SFCT: A Diffusion Model with Spatial-Frequency Cross Transformer for Medical Image Segmentation" Yuxuan Jiang, Yi Ding, Guobin Zhu, Zhen Qin, Minghui Pang, and Mingsheng Cao
R	B2007 "Multi-Modal Deep Feature Integration for Alzheimer's Disease Staging" Amritpal Singh, Wenqi Shi, and May Wang
R	B2002 "MFHCC: Multi-View Feature Hierarchical Contrastive Clustering Model for Multi-Omics Data" Zongli Jiang, Hongwei Ren, Ziwei Yang, Jinli Zhang, and Zheng Chen
R	B1097 "M <sup>3</sup> CI-Net: Multi-Modal MRI-Based Characteristics Inspired Network for IDH Genotyping" Jingxiao Yao, Jianhong Cheng, Hulin Kuang, Jin Liu, and Jianxin Wang
S	B936 "HiSwin UT: Hybrid Swin Transformers Network for Segmenting 3D in vivo Two-photon Images of Rodent Cerebrovasculature" Jie Li, Chong Wang, Zizhen Li, Hao Li, Mingzhu Sun, and Xin Zhao
S	B808 "Improved YOLOX Framework for Automatic Large Intracranial Artery Stenosis Detection in Digital Subtraction Angiography Images" Weijin Xu, Huihua Yang, Tao Tan, Wentao Liu, Feng Gao, Yiming Deng, Xipeng Pan, and Ruisheng Su

### Session 43: Biomedical and Health Informatics (20)

Chair: Haodi Zhang

Email: [zhanghd.ustc@gmail.com](mailto:zhanghd.ustc@gmail.com)

R	B722 "DILM-ICD: A Deep Iterative Learning Model for Automatic ICD Coding" Weiyang Qiu, Yifan Wu, Yiming Li, Kunying Niu, Min Zeng, and Min Li
R	B889 "Entity Relation Aware Graph Neural Ranking for Biomedical Information Retrieval" Yichen He, Xiaofeng Liu, Jinlong Hu, and Shoubin Dong
R	B1072 "FedGST: Federated Graph Spatio-Temporal Framework for Brain Functional Disease Prediction" Junbin Mao, Jin Liu, Yi Pan, Hanhe Lin, and Xu Tian
S	B927 "Online Continual EEG Classification with Dynamic Memory Evolution: A Principled Approach" Tiehang Duan, Zhenyi Wang, Gianfranco Doretto, Fang Li, Cui Tao, and Donald Adjeroh
S	B758 "Simulation of ECG Using a Rabbit Cardiac Conduction Model with Dual-Pathway Atrioventricular Node"

	Maxim Ryzhii and Elena Ryzhii
S	B893 "End-to-End PPG Processing Pipeline for Wearables: From Quality Assessment and Motion Artifacts Removal to HR/HRV Feature Extraction" Mohammad Feli, Kianoosh Kazemi, Iman Azimi, Yuning Wang, Amir Rahmani, and Pasi Liljeberg

Session 44: Biomedical and Health Informatics (21)

Chair: Cihan Bilge KAYASANDIK

Email: [cbkayasandik@medipol.edu.tr](mailto:cbkayasandik@medipol.edu.tr)

R	B2090 "Synthetic Monocular Depth Estimation Dataset for Cataract Surgery Assistance" Yingquan Zhou, Zhongxi Qiu, Mingming Yang, Yan Hu, and Jiang Liu
R	B1114 "MouseScholar: Evaluating an Image+Text Search System for Biocuration" Juan Trelles Trabucco, Carla Floricel, Cecilia Arighi, Hagit Shatkay, Daniela Raciti, Martin Ringwald, and G. Elisabeta Marai
S	B540 "Dynamic Graph Attention: Unraveling Spatio-Temporal Synchrony in EEG Data" Federica Proietto Salanitri, Giovanni Bellitto, Raffaele Mineo, Matteo Pennisi, Amelia Sorrenti, Salvatore Calcagno, Daniela Giordano, Simone Palazzo, and Concetto Spampinato
S	B1069 "High-Activity Enhancer Generation based on Feedback GAN with Domain Constraint and Curriculum Learning" Jiahao Li, Liwei Xiao, Jiawei Luo, Xianliang Liu, and Junjie Chen
S	B691 "Multi-source unsupervised domain-adaptation for automatic sleep staging" Yangxin Zhu, Shikui Tu, Lin Zhang, and Lei Xu

## December 8: Afternoon Sessions I (2pm-4pm)

Session 46: Biomedical and Health Informatics (23)

Chair: Yuxuan Jiang

Email: [202221090129@std.uestc.edu.cn](mailto:202221090129@std.uestc.edu.cn)

R	B415 "Semantic-Similarity Collaborative Knowledge Distillation Framework for Whole Slide Image Classification" Zehua Ye, Yonghong He, and Tian Guan
R	B423 "MixUNet: Mix the 2D and 3D Models for Robust Medical Image Segmentation" Jiawei Li, Shizhan Chen, Jijun Tang, Shiqiang Ma, and Fei Guo
R	B477 "Domain-specific Knowledge Guided Self-supervised Learning for Pathological Image Segmentation" Chenhui Wang, Hulin Kuang, Jin Liu, Junjian Li, Hailin Yue, and Jianxin Wang
S	B1020 "Fast MRI Reconstruction via Boosting Filter Diversity of Deep Cascading Networks" Xiao-Xin Li, Wen-Hao Zheng, Haigen Hu, and Lei Chen
S	B2146 "FedARC: Federated Learning for Multi-Center Tuberculosis Chest X-ray Diagnosis with Adaptive Regularizing Contrastive Representation" Chang Liu, Yong Luo, Yongchao Xu, and Bo Du
S	B297 "MSCCNet: Multi-Scale Convolution-Capsule Network for Cervical Cell Classification" Hua Chen, Juan Liu, Peng Jiang, Yu Jin, Jing Feng, Baochuan Pang, Dehua Cao, and Cheng Li
S	B437 "Prediction of Metabolic Syndrome Based on Machine Learning Techniques with Emphasis on Feature Relevances and Explainability Analysis" Begoña Ispizua, Diana Manjarres, and Iratxe Niño

Session 49: Biomedical and Health Informatics (25)

Chair: Yue Zhang

Email: [yxz1148@alumni.bham.ac.uk](mailto:yxz1148@alumni.bham.ac.uk)

R	B664 "A Tongue Feature Extraction Method Based on a Sublingual Vein Segmentation" Yulong Hu, Dehui Qiu, Xiaohua Wan, Juan Zhang, Xiaotong Wang, Fa Zhang, and Bin Hu
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R	B510 "CAMPEOD: A Cross Attention-Based Multi-Scale Patch Embedding Organoid Detection Model" Xun Deng, Lun Hu, Zhu-Hong You, and Peng-Wei Hu
R	B516 "CPAConv-POCO:a Continuous Position Adaptive Convolution based POCO for lung nodule 3D Reconstruction" Ao Jiang and Feng Liu
S	B1051 "A Closer Look at Weak Supervision's Limitations in WSI Recurrence Score Prediction" Namitha Guruprasad, Amir Akbarnejad, Gilbert Bigras, Penny J. Barnes, and Nilanjan Ray
S	B398 "A Control Chart Method for Simultaneously Monitoring the Average Level and Stability of Surgical Quality" Ruoyu Liu, Xin Lai, Jiayin Wang, Paul B.S. Lai, and Ka Chun Chong
S	B944 "Conservative Q-Learning for Mechanical Ventilation Treatment Using Diagnose Transformer-Encoder" Yuyu Yuan, Jinsheng Shi, Jincui Yang, Chenlong Li, Yuang Cai, and Baoyu Tang
S	B765 "A generalizable physiological model for detection of Delayed Cerebral Ischemia using Federated Learning" Ahmed Elhussein, Murad Megjahni, Daniel Nametz, Miriam Weiss, Jude Savarraj, Soon Bin Kwon, David J. Roh, Saachin Agarwal, E. Sander Connolly, Jr, Angela Velazquez, Jan Claassen, Huimahn A. Choi, Gerrit A. Schubert, Soojin Park, and Gamze Gürsoy

Session 53: video session online

The link to watch the papers in the BIBM 2023 video session BIBM23 is:

[https://ieeecps.org/#!/auth/login?conference\\_video=1&pid=59kB3AP5W1N1xJCjK0VWOC](https://ieeecps.org/#!/auth/login?conference_video=1&pid=59kB3AP5W1N1xJCjK0VWOC)

S	B923 "A Heterogeneous Ranking Contrastive Learning Method for Drug-Target Interaction Prediction" Desheng Kong, Xu Jin, Yanhao Li, Maoqiang Xie, Jingjing He, Mingming Liu, Yalou Huang, Weiwei Yang, Hao Shi, and Yiran Wan
R	B833 "TS-DDD: A Two-Stage Training Strategy for Dialogue-based Disease Diagnosis" Tianbao Zhang, Huiying Cao, Shi Feng, Yuan Cui, and Daling Wang
S	B355 "Interpretable Deep Learning Models With Concept Whitening Layers" Megana Reddy Boddam and Wooyoung Kim
R	B335 "Detection of potential anxiety in social media based on multimodal fusion with deep learning methods" Shuzhong Lai and Zepeng Li
S	B274 "Interpretable attention network with multi-view learning for drug-drug interaction prediction" Xuan Lin, Qi Wen, Sijie Yang, Zu-Guo Yu, Yahui Long, and Xiangxiang Zeng
S	B716 "A Dynamic Composite Ensemble Learning Framework for Multi-Stage Dementia Prediction" Bangyan Li, Xingjiao Wu, Yuling Sun, and Liang He
R	B276 "Bridging the Gap: Cross-modal Knowledge Driven Network for Radiology Report Generation" Beichen Kang, Yun Xiong, Jianbo Jiao, Yao Zhang, Xing Jia, and Ji Li
S	B656 "DeepLA: A deep learning-based model for predicting protein function from protein sequence and evolutionary information" Bing Jia, Tao Feng, Chenri Li, Baoqi Huang, Fei Hao, and Dongjun Liu
S	B292 "TNFIPs-Net: A deep learning model based on multi-feature fusion for prediction of TNF- $\alpha$ inducing epitopes" Shengli Zhang, Yujie Xu, Yuanyuan Jing, and Yunyun Liang
S	B2131 "Multi-granularity Information Flow Enhanced Skeleton-based Infant Seizure Detection" huiyuan chen, weiting chen, na li, and yiqing zhang
R	B203 "Gene Expression Profile Prediction under Drug Action Based on Generative Adversarial Networks" Liang Yu, Da Dong, Huan Zhu, and Lin Gao
S	B948 "GTDDA: Graph Convolutional Network and Graph Transformer Structure for Drug Repositioning"

	Jialan Tang, Xiaoting Zeng, Pingkang Li, Weilin Chen, and Baiying Lei
S	B1105 "Trusted Fine-grained Medical Image Classification through Multiple Evidence Fusion" Zhikang Xu, Xiaodong Yue, Bofeng Zhang, Ying Lv, and Zhipeng Wei
R	B484 "Location-Aware Transformer Network for Few-Shot Medical Image Segmentation" Wendong Huang, Bin Xiao, Jinwu Hu, and Xiuli Bi
S	B372 "Brain Functional Residual Temporal Convolution Network for Major Depressive Disorder Recognition" Xiaofang Sun, Yonghui Xu, Xiangwei Zheng, Wei Guo, Wei He, Yali Jiang, Yongqing Zheng, and Lizhen Cui
R	B2023 "Integrating Heterogeneous Biological Networks and Ontologies for Improved Protein Function Prediction with Graph Neural Networks" Nhat Tran and Jean Gao
R	B485 "scSRL: Siamese Representation Learning-based method for analyzing single-cell RNA-seq data" Zhaoyang Sun, Ying Liu, Pei Liu, Wanwan Shi, and Jiawei Luo
S	B469 "Long Video Micro-expression Spotting Based On OCC Theory" Bingtong Liu, Zheyuan Zhang, Ju Zhou, Hanpu Wang, Yingjuan Jia, and Tong Chen
S	B205 "How GNNs Facilitate CNNs in Mining Geometric Information from Large-Scale Medical Images" Yiqing Shen, Bingxin Zhou, Xinye Xiong, Ruitian Gao, and Yu Guang Wang
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S	B2034 "Focusing Intracranial Aneurysm Lesion Segmentation by Graph Mask2Former with Local Refinement in DSA Images" Yancheng Mo, Yanlin Cheng, Yan Hu, Jiongfu Xu, Hao Wang, Limeng Dai, and Jiang Liu
S	B416 "Unsupervised Domain Adaptation by Cross-Prototype Contrastive Learning for Medical Image Segmentation" Zhuotong Cai, Jingmin Xin, Siyuan Dong, Chenyu You, Peiwen Shi, Tianyi Zeng, Jiazhen Zhang, John Onofrey, Nanning Zheng, and James Duncan
R	B588 "Spinal Lesions Classification and Localization with ACAT-Net from X-ray Images" Hongzhi Liu, Xiaoli Mai, Junyang Han, Shiyu Zhu, Jiacheng Nie, Weixuan Wan, Chunfeng Yang, Shijie Wang, Wenxue Yu, Xiaoying Tang, Cheng Xue, Pinzheng Zhang, Qianjin Feng, and Yang Chen
S	B627 "IDAA-NET: An Image Domain Adaptive Alignment Network for Unsupervised Liver Vessel Segmentation from CTA Images" Haixiao Geng, Jingfan Fan, Yujia Yuan, Danni Ai, Feng Duan, and Jian Yang
R	B260 "Addressing Sparse Annotation: a Novel Semantic Energy Loss for Tumor Cell Detection from Histopathologic Images" Zhengyang Xu, Xianglong Du, Yuxin Kang, Hong Lv, Ming Li, Wentao Yang, Lei Cui, Hansheng Li, Yaqiong Xing, Jun Feng, and Lin Yang
S	B482 "ParallelCoDiff: Parallel Cooperative Diffusion Model for Joint Optic Disc and Cup Segmentation" Wenqing Li and Wenhui Huang
S	B800 "Implicit Feature Augmentation with Feature Transfer For Class-Imbalanced Medical Image Classification" Mei Yu, Hao Zheng, Xuewei Li, Jie Gao, Xuzhou Fu, Zhiqiang Liu, and Ruiguo Yu
R	B865 "Box2Pseudo: A Semi-Supervised Learning Framework for Pulmonary Nodule Segmentation with Box-Prompt Pseudo Supervision" Siqi Zhang, Jingkun Yue, Chengdi Wang, Xiaohong Liu, and Guangyu Wang
S	B630 "FedCCE: A class-level contribution explainable federated learning based on comparable prototypes collaboration for multi-site medical image classification" Bo Lin, Jing Wang, Yunfei Dou, Yuquan Zhang, Wei Yue, Gang Yu, and Jianwei Yin
S	B1092 "Interactive Multi-object Segmentation for Pathological Images with Similarity-based Propagation" Jiawei Wang, Jinhua Liu, Lin Chen, Guangshun Wei, and Yuanfeng Zhou
R	B811 "R2L-Net: Rapid Medical Image Segmentation Network Regularized by Self-Supervised Relative Localization Task" Yixin Wang, Wenxin Yu, Zhiqiang Zhang, Jun Gong, Peng Chen, and Chang Liu
R	B947 "ImmRegInformer: an interpretable Transformer-based method for prioritizing immune-regulatory cancer drivers" Liwen Xu, Boya Ji, Yijun Peng, Wending Pi, and Shaoliang Peng
R	B958 "An Attention-based Label Mapping and Multi-factor Domain Adaptation Approach for ACS Prediction" Yutao Dou, Zhengyu Liu, Xiongjun Zhao, Liangrui Pan, and Shaoliang Peng
S	B849 "Specific-Modal Spatial Guidance and Feature Enhancement for Multi-modal Brain Tumor Segmentation" Junyang Han, Hongzhi Liu, Shiyu Zhu, Jiacheng Nie, Weixuan Wan, Chunfeng Yang, Wenxue Yu, Pinzheng Zhang, Xiaoying Tang, Yang Chen, Shijie Wang, Cheng Xue, and Jean-Louis Coatrieux
S	B2147 "A joint CNN-GNN framework for early diagnosis of AD using multi-source multi-modal data" Yanteng Zhang, Xiaohai He, Lipei Zhang, Qingyan Cai, Xia Ren, and Yan Liu
R	B814 "RobustHealthFL: Robust Strategy Against Malicious Clients in Non-iid Healthcare Federated Learning"

	peng xi, wenjuan tang, and Shaoliang Peng
R	B885 "STLDA: A Spatiotemporal Linear Discriminant Analysis for Single-trial ERP-based Depression Recognition" Yuhan Shi, Nan Zhao, Wenjie Yuan, Qiqi Zhao, XiaoWei Zhang, and Bin Hu
S	B629 "A Weak Supervision-based Robust Pretraining Method for Medical Visual Question Answering" Shuning He, Haiwei Pan, Kejia Zhang, Cheng Gong, and Zhe Li
S	B712 "Synthesizing with Diffusion model for improving medical image segmentation performance" Zengan Huang, Qinzhu Yang, Mu Tian, and Yi Gao
S	B962 "Enhanced Knowledge Injection for Radiology Report Generation" Qingqiu Li, Jilan Xu, Runtian Yuan, Mohan Chen, Yuejie Zhang, Rui Feng, Xiaobo Zhang, and Shang Gao
R	B538 "ConvUNET: a Novel Depthwise Separable ConvNet for Lung Nodule Segmentation" Xinkai Tang, Feng Liu, Ruoshan Kong, Fei Luo, Wencai Huang, and Jiani Zou
S	B503 "Discrete Residual Diffusion Model for High-Resolution Prostate MRI Synthesis" Zhitao Han and Wenhui Huang
S	B537 "Stain Normalization and Augmentation in Frequency Space for Histology Analysis" Yingfan Li, Huaiji Zhou, Na Liu, and Yiqing Shen
S	B1995 "Variational Autoencoder with Temporal Condition for Effective Shape-based Calcium Imaging Neuron Registration" Cyrus Y. H. Fung, Sudipta Acharya, Tak Pan Wong, and Steven H. H. Ding
R	B565 "Emotion and Stress Recognition Utilizing Galvanic Skin Response and Wearable Technology: A Real-time Approach for Mental Health Care" Elahe Hosseini, Ruijie Fang, Ruoyu Zhang, Setareh Rafatirad, and Houman Homayoun
R	B1088 "Soft Tissue Sarcoma Segmentation Network Based on Ensemble Learning" Liang Zhao, Yu Shao, Chaoran Jia, Jing Gao, Yihan Chen, and Zhanxin Gang
S	B1089 "Multi-modal Learning with Missing Modality in Predicting Axillary Lymph Node Metastasis" Shichuan Zhang, Sunyi Zheng, Zhongyi Shui, Honglin Li, and Lin Yang
S	B514 "A Time-Guided Method for Constructing Combined Medical Event Chains" Lishuang Li, Tianqi Hu, and Xueyang Qin
R	B2047 "Integrating Multimodal Contrastive Learning and Cross-Modal Attention for Alzheimer's Disease Prediction in Brain Imaging Genetics" Rong Zhou, Houliang Zhou, Li Shen, Brian Y. Chen, Yu Zhang, and Lifang He
R	B2017 "A Hybrid Outbreak Detection Using Ontology-based Data Collection from Social Media" Ghazaleh Babanejaddehaki, Aijun An, and Heidar Davoudi
S	B982 "Biomedical Event Detection Based on Domain Knowledge Injection and Model Dual Channel Fine-tuning" Xinyu He, Xue Han, and Shixin Li
S	B1049 "A Self-Attention Based DNN Model to Classify Dynamic Functional Connectivity for Autism Spectrum Disorder Diagnosis" Libiao Chen, Sizhe Wang, Zhenyu Wei, YaoQing Zhang, Mengzhu Luo, and Yin Liang
R	B996 "Chat2Brain: A Method for Mapping Open-Ended Semantic Queries to Brain Activation Maps" Yaonai Wei, Tuo Zhang, Han Zhang, Tianyang Zhong, Lin Zhao, Zhengliang Liu, Chong Ma, Songyao Zhang, Muheng Shang, Lei Du, Xiao Li, Tianming Liu, and Junwei Han
R	B905 "Enhancing Longitudinal Medical Image Segmentation through Spatial-temporal Fusion" Liang Zhao, Chaoran Jia, Yu Shao, Zhanxin Gang, Rui Lin, and Ruixin Ma
R	B668 "Biomedical Causal Relation Extraction via Data Augmentation and Multi-source Knowledge Fusion" Jing Hao, Lishuang Li, and Xueyang Qin
R	B1112 "A Privacy Preserving Computer-aided Medical Diagnosis Framework with Outsourced Model"

	Xinyu Feng, Qingni Shen, Cong Li, Xuwei Wang, Niantao Xie, Yuejian Fang, and Zhonghai Wu
R	B2048 "A Morphology Focused Cell Detection Model for Histopathology Images" Zhe Wang, Fangyue Wei, Shuyu Guo, Xiaoting Che, and Tian Bai
R	B1033 "A Novel Deep Learning Approach Featuring Graph-Based Algorithm for Simultaneous Cell Segmentation and Tracking" Keliang Zhao, Jovial Niyogisubizo, Linxia Xiao, Yi Pan, and Yanjie Wei
S	B282 "Polyp2Former: Boundary Guided Network Based on Transformer for Polyp Segmentation" Xiaoshuang Huang, Jinze Huang, Shuo Wang, Yaoguang Wei, Dong An, and Jincun Liu
R	B673 "Semi-MedSeq: Semi-supervised Semantic Segmentation for Medical Image Sequences" Runtian Yuan, Jilan Xu, Qingqiu Li, Yuejie Zhang, Rui Feng, Xiaobo Zhang, Tao Zhang, and Shang Gao
R	B303 "Assessing and Enhancing Robustness of Deep Learning Models with Corruption Emulation in Digital Pathology" Peixiang Huang, Songtao Zhang, Yulu Gan, Rui Xu, Rongqi Zhu, Wenkang Qin, Limei Guo, Shan Jiang, and Lin Luo
S	B536 "Multi-Modal Network based on Spatio-temporal and Attention for Emotion Recognition" Yong Zhang, Wenyun Chen, and Cheng Cheng
S	B2144 "UniMOS: A Universal Framework For Multi-Organ Segmentation Over Label-Constrained Datasets" Can Li, Sheng Shao, Junyi Qu, Shuchao Pang, and Mehmet A. Orgun
S	B472 "A Diffusion Model-based Joint Dual-Task Network for Low-Quality Retinal Image Enhancement and Vessel Segmentation" Fengting Liu and Wenhui Huang
R	B1099 "Noninvasive diagnosis of hepatocellular carcinoma by integrating the genetic, epigenetic and fragmentation features of cell-free DNAs" Xiaoqing Peng, Junjie You, Wanxin Cui, and Mengxi Zou
S	B460 "Coarse-Fine View Attention Alignment-Based GAN for CT Reconstruction from Biplanar X-Rays" Zhi Qiao, Dongheng Chu, Hanqiang Ouyang, Huishu Yuan, Xiantong Zhen, Pei Dong, and Zhen Qian
R	B488 "A Dual-View Fusion Network for Automatic Spinal Keypoint Detection in Biplane X-ray Images" Dandan Zhou, Lijun Guo, Rong Zhang, Xiuchao He, Qiang Wang, and Jianhua Wang
S	B974 "ERU-Net: An Enhanced Regression U-Net with Attention Gate and Adaptive Feature Fusion Block for Brain Age Prediction" Jiaxiang Cao, Yixiao Hu, and Baobin Li
S	B968 "Predicting Chronic Obstructive Pulmonary Disease Based on Multi-Stage Composite Ensemble Learning Framework" Liang Zhao, Zhanxin Gang, Chaoran Jia, Yu Shao, Chenhua Guo, and Jing Gao
S	B863 "EEG based Parkinson Detection through Supervised Information Enhanced Contrastive Learning" Jian Song, Xiang Li, Wenjing Jiang, Chunxiao Wang, Zhigang Zhao, Jialiang Lv, and Bin Hu
R	B757 "Auto-Augmentation Contrastive Learning for Wearable-based Human Activity Recognition" Qingyu Wu, Jianfei Shen, Feiyi Fan, Yang Gu, Chenyang Xu, and Yiqiang Chen
R	B549 "A Knowledge Graph-based Clustering Approach for Drug Side Effects Prediction" Ying Zheng and Shibo Xu
S	B1976 "ProBioRE: A Framework for Biomedical Causal Relation Extraction Based on Dual-head Prompt and Prototypical Network" Lishuang Li and Wanting Ning
R	B366 "AIPPT: Predicts anti-inflammatory peptides using the most characteristic subset of bases and sequences by stacking ensemble learning strategies" ruiqi liu, xiuhao fu, Shankai Yan, Zilong Zhang, and Feifei Cui



S	B249 "Adaptive Semi-Supervised Learning from Stronger Augmented Transformations of Medical Texts" Xuemiao Zhang and Junfei Liu
S	B959 "ADCL: an adaptive dual contrastive learning framework based on MHGAT and VAE for cell type deconvolution in spatial transcriptomics" Shilin Zhang and Qingchen Zhang
R	B2117 "Enhancing Medical Report Generation in Multi-Slice Fusion Scenarios" Shenshen Bu, Taiji Li, and Zhiming Dai
S	B234 "Adversarial Training with Comprehensive Objective for Medical Image Report Generation" Xuemiao Zhang and Junfei Liu
S	B235 "Adaptively Multi-Objective Adversarial Training for Medical Image Report Generation" Xuemiao Zhang and Junfei Liu
S	B1045 "TetraCVD: a temporal-textual Transformer based model for cardiovascular disease diagnosis" Kailong Lu, Fei Zhao, Penghuan Gu, Haoyan Wang, and Tianyi Zang
R	B1081 "TSM: Three-Stream Mix For Unsupervised Medical Image Registration" Zhen Gu, Daoqiang Zhang, Fang Chen, Peng Wan, and Lingyu Chen

# Workshop Program Schedule

<b>The 4<sup>th</sup> International Workshop on Machine Learning for EEG Signal Processing (MLESP 2023)</b> December 5-6, 2023 <i>Workshop Chair: Larbi Boubchir</i>		
Day 1 (December 5 <sup>th</sup> , 8:30am-6pm)		
Time	Title	Presenter/Authors
8:30-8:40	<b>Opening Workshop</b>	
8:40-9:00	<b>S01202:</b> Diagnosis of Schizophrenia from EEG signals Using ML Algorithms	Tariq Qayyum, Asadullah Tariq, Mohamed Adel Serhani, Zouheir Trabelsi, and Abdelkader N Belkacem
9:00-9:20	<b>S01204:</b> Epileptic EEG Signal Detection based on Uncorrelated Multilinear Principal Component Analysis and Metric Learning	Yankai Yang, Juan Wang, Jie Xu, Kuiting Yan, and Shasha Yuan
9:20-9:40	<b>S01205:</b> Improving Multichannel Raw Electroencephalography-based Diagnosis of Major Depressive Disorder via Transfer Learning with Single Channel Sleep Stage Data	Charles Ellis, Abhinav Sattiraju, Robyn Miller, and Vince Calhoun
9:40-10:00	<b>S01207:</b> Automatic Sleep Stage Classification by CNN-Transformer-LSTM using single-channel EEG signal	Duc Thien Pham and Roman Mouček
10:00-10:20	<b>Coffee Break</b>	
10:20-10:40	<b>S01210:</b> Progressive Fourier Transform (PFT): Enhancing EEG-Based Classification for Stress and Seizure Detection	Nisreen Amer, Samir Belhaouari, and Halima Bensmail
10:40-11:00	<b>S01214:</b> Information Geometry Approach to Analyzing Simulated EEG Signals of Alzheimer's Disease Patients and Healthy Control Subjects	Jia-Chen Hua, Eun-jin Kim, and Fei He
11:00-11:20	<b>B214:</b> Attention Fusion and Abnormal Brain Topology Neural Network for Mild Depression Recognition	Liangliang Liu, Shuting Sun, Guanru Wang, Jing Zhu, Xiaowei Li, and Bin Hu
11:20-11:40	<b>B223:</b> EEG-Based Depression Recognition Using Convolutional Neural Network with FFT and EMD	Jing Zhu, Pengfei Hou, Xin Zhang, Xiaowei Li, and Bin Hu
11:40-12:00	<b>B225:</b> Neonatal seizure detection combined deep network and meta-learning	Xueni Li, Jie Liu, Qi Yuan, and Weiwei Nie
12:00-12:20	<b>B602:</b> High-order Brain Network Analysis of Depression Based on Dynamic Functional Connectivity	Xuexiao Shao, Wenwen Kong, Huanjun Liu, Yongxiang Wang, and Bijuan Huang
12:30-14:00	<b>Lunch</b>	
14:00-14:20	<b>B1078:</b> Dysfunctional brain dynamics in Subjects with major depression: An EEG microstate spectral analysis	Jianxiu Li, Yanrong Hao, and Hongwei Xu

<b>14:20-14:40</b>	<b>S01208:</b> Improving Explainability for Single-Channel EEG Deep Learning Classifiers via Interpretable Filters and Activation Analysis	Charles Ellis, Robyn Miller, and Vince Calhoun
<b>14:40-15:00</b>	<b>B2000:</b> Abnormal cortical functional network and microstates alterations in depression: insights from effective connectivity and EEG microstates	Jianxiu Li, Yanrong Hao, and Hongwei Xu
<b>15:00-15:20</b>	<b>S01209:</b> Use of Spiking Neural Networks over Augmented EEG Dataset	Václav Hrabík and Roman Mouček
<b>15:20-15:40</b>	<b>S01212:</b> Single-Channel EEG Artifact Identification with the Spectral Slope	Melissa Fasol, Javier Escudero, and Alfredo Gonzalez-Sulser
<b>16:00-16:20</b>	<b>Coffee Break</b>	
<b>16:20-16:40</b>	<b>S01213:</b> Deep learning applied to EEG data with different montages using spatial attention	Dung Truong, Muhammad Khalid, and Arnaud Delorme
<b>16:40-17:00</b>	<b>B1054:</b> Enhancing Artifact Removal from Scalp EEG Using State-wise Deep Convolutional Network	Xuepeng Huang, Zexuan Hao, Yu Pan, and Weibei Dou
<b>17:00-17:20</b>	<b>B321:</b> Classification of Left/Right Hand and Foot Movements from EEG using Machine Learning Algorithms	Dalila Cherifi, Baha Eddine Berghouti,
<b>17:20-18:00</b>	<b>Discussions</b>	

<b>Day 2 (December 6<sup>th</sup>, 9am-12pm)</b>		
<b>Time</b>	<b>Title</b>	<b>Presenter/Authors</b>
<b>9:00-9:20</b>	<b>S01206:</b> High-performance Deep Neural Network Pretrained with Contrastive Learning for Asynchronous High-frequency c-VEP Detection	En Lai, Ximing Mai, and Jianjun Meng
<b>9:20-9:40</b>	<b>B1095:</b> MEGNet: A MEG-Based Deep Learning Model for Cognitive and Motor Imagery Classification	Minerva Sarma, Charles Bond, Sanjeev Nara, and Haider Raza
<b>9:45-10:00</b>	<b>Coffee Break</b>	
<b>10:00-10:20</b>	<b>S01211:</b> IMU-integrated Artifact Subspace Reconstruction for Wearable EEG Devices	Velu Prabhakar Kumaravel and Elisabetta Farella
<b>10:20-10:40</b>	<b>B2060:</b> A Multitask Framework for Emotion Recognition Using EEG and Eye Movement Signals with Adversarial Training and Attention Mechanism	Wei Liu, Yun Luo, Yi Lu, and Yong Lu
<b>10:40-11:00</b>	<b>S01203:</b> Pain Management and Conditioning through Virtual Reality and Affective Computing	Andrea Bugeja and Alexiei Dingli
<b>11:00-12:00</b>	<b>Discussions &amp; Closing Remarks</b>	

<b>The 4th International Workshop on Deep Learning Techniques for Bioinformatics and Biomedicine</b>		
<i>Workshop Date: Dec 8      Workshop Chair: Prof. Fuquan, Zhang</i>		
<b>Time</b>	<b>Title</b>	<b>Presenter/Author</b>

8:10am-8:30am	<i>S02208: Learning Topological Representation of 3D Skeleton Dynamics with Persistent Homology for Human Activity Recognition</i>	Hao Yang
8:30am-8:50am	<i>S02209: MT-LGSGCN: EEG-Based Emotion Recognition Using Multi-scale Temporal and Local-Global Spatial Graph Convolution Network</i>	Yi-Chun Huang
8:50am-9:10am	<i>S02210: Research on Common Structrue of Motion Data</i>	Junyu Liu
9:10am-9:30am	<i>S02215: A method of human motion reconstruction with sparse joints based on attention mechanism</i>	Junduo Liu
9:30am-9:50am	<i>B261: EEG-MLP: An all-MLP Architecture for EEG Emotion Recognition</i>	Dunhui Liu
9:50am-10:10am	<i>B266: Investigating Consistency Constraints in Heterogeneous Multi-task Learning for Medical Image Processing</i>	Jingyun Yang
10:10am-10:30am	<i>B269: CPSS-Net: A Cross-pseudo Semi-supervised Network for Liver Vessel Segmentation from CTA Images</i>	Shuo Yang
10:30am-10:50am	<i>B307: An unsupervised deep learning framework for gene regulatory network inference from single-cell expression data</i>	Guo Mao
10:50am-11:10am	<i>B323: Learning Topological Representation of Sensor Network with Persistent Homology in HCI Systems</i>	Yan Yan
11:10am-11:30am	<i>B331: Semi-supervised Contrast Learning-Based Segmentation of Choroidal Vessel in Optical Coherence Tomography Images</i>	Xiaoming Liu
<b>Coffee Break</b>		
14:00pm-14:20pm	<i>B406: A Multi-Frame Rate Network with Attention Mechanism for Depression Severity Estimation</i>	Ruibin Wang
14:20pm-14:40pm	<i>B474: A Doctors Behavior Aware and Domain Knowledge Driven Model for Medical Report Generation</i>	Han Wang
14:40pm-15:00pm	<i>B592: Predicting Lymph Node Metastasis of Colorectal Cancer in CT Scans Using Attention-Based Multiple Instance Learning</i>	Min Xie
15:00pm-15:20pm	<i>B670: DBFormer: A Deep Learning Model to Predict Tumor Mutation Burden of Lung Adenocarcinoma</i>	Xueyong Yang
15:20pm-15:40pm	<i>B753: SDATNet: Self-Distillation Adversarial Training Network for AD classification</i>	Tianyuan Song
15:40pm-16:00pm	<i>B771: Adapting Protein Language Models for Explainable Fine-Grained Evolutionary Pattern Discovery</i>	Ashley Babjac
16:00pm-16:20pm	<i>B821: Domain Adaptive Bi-Branch Fusion Vision Transformer for 3D Medical Image Segmentation</i>	Zongli Jiang
16:20pm-16:40pm	<i>B994: Cross-contrastive learning for mapping T cell receptor-antigen binding specificities</i>	Fei Ye
16:40pm-17:00pm	<i>B2013: Deep Learning Approach for Automated Gas Chromatography Peak Detection to Account for Co-elution</i>	Loc Cao
17:00pm-17:20pm	<i>B2050: Optimization of synthetic oscillatory biological networks through Reinforcement Learning</i>	Leonardo Giannantoni
<b>Closing Remarks</b>		

**Note:** All timings in this schedule are presented in Beijing Time (GMT+8).

<b>3rd Biomedical Informatics Applications in Translational Research and Rare Diseases</b>		
<i>Workshop Chairs: Yanji Xu, Qian Zhu</i>		
<b>Time</b>	<b>Title</b>	<b>Presenter/Author</b>
2:00 – 2:10pm	<b>Starting introduction</b>	Yanji Xu
2:10 – 2:30pm	STADS: Spatial Transcriptomics to Aid Drug-reposition Recommendation	Abdullah Karaaslanli
2:30 – 2:50pm	In silico strategy to model LMP1 of Epstein–Barr virus protein	Dayang Sharyati Datu Abdul Salam
2:50 – 3:10pm	Model-based Deep Aided Recognition of Irregular gene from RNA-seq Data	Halima Bensmail
3:10 – 3:30pm	Enhancing Patient Care in Rare Genetic Diseases: An HPO-based Phenotyping Pipeline	Yao Xiao
3:30 – 3:50pm	Prediction of Drug Targets based on In Vitro Activity Profiles Toward Drug Repurposing for Rare Diseases	Binghan Xue/Yanji Xu
3:50 – 4:20pm	<b>Coffee Break</b>	

4:20 – 4:40pm	HealthBridge: A Decentralized and Interoperable Healthcare App for Rare Disease Communities	Ziyuan Guo
4:40 – 5:00pm	Mining NIH BTRIS Data for Drug Repurposing: A Case Study of Glioblastoma	Shixue Sun
5:00 – 5:20pm	Clinical Assessment of Pneumocystosis with MIMIC Data	Huanfei Wang
5:20 – 5:30pm	<b>Closing Remarks</b>	

<b>5<sup>th</sup> IEEE BIBM Workshop on Long Non-Coding RNAs (BIBM-LncRNA)</b> <b>Istanbul, Turkey, December 7, 2023</b> <b>(All times are Turkey Time (TRT))</b> <i>Workshop Chairs: Don Adjeroh, Xiaobo Zhou, Ivan Martinez, and Leonard Lipovich</i>		
<b>Time</b>	<b>Title</b>	<b>Presenter/Author</b>
<b>Dec. 7, 2023</b>		
10:25-10:30am TRT	Introduction	Workshop Chairs (Don Adjeroh, Xiaobo Zhou, Leonard Lipovich, Ivan Martinez)
10:30-11:20am TRT	<b>Keynote 1: LncRNAs, Chromatin, and Gene Regulation</b>	<b>David Corey, PhD</b> UT Southwestern Medical Center Dallas, Texas, USA
11:20-12:20pm TRT	<i>Presentations (for Accepted Papers) Session 1</i>	
	Identification of subtype-specific master regulatory long non-coding RNAs of gastric cancer through a network-based approach ( <b>15 minutes</b> )	Jiang Li, Kai Song, Xiang Li, Yijuan Wang, & Xin Wang, The Chinese University of Hong Kong, and City University of Hong Kong, Hong Kong, China
	LncRNA subcellular localization signals – Are the two ends equal? A machine learning analysis across multiple cell lines ( <b>15 minutes</b> )	Weijun Yi, Jason Miller, Gangqing Hu, and Donald A. Adjeroh West Virginia University, Morgantown WV, USA
	SNP analysis of lncRNA genes associated with polycystic ovary syndrome using GWAS catalog and the 1000 Genomes Project ( <b>10 minutes</b> )	Igor Bulanov, Dmitry Romanov, and Leonard Lipovich Southern Federal University, Rostov on Don, Russia, and Wayne State University, Detroit, Michigan, USA
	Coding and non-coding RNA network analysis of polycystic ovary syndrome: toward a competing endogenous RNA network ( <b>10 minutes</b> )	Ekaterina Derevyanchuk, Elizaveta Kulaeva, Leonard Lipovich, and Tatiana Shkurat Southern Federal University, Rostov on Don, Russia
12:20-2:00pm TRT	<b>Lunch</b>	
2:00-2:30pm TRT	<b>Plenary Talk:</b> Targeting the long non-coding RNA lnc-HLX-2-7 in group 3 childhood Medulloblastoma	<b>Ranjan Perera, PhD</b> Johns Hopkins University School of Medicine, Baltimore, Maryland, USA
2:30-3:20pm TRT	<b>Keynote Talk 2: Uncovering the Journey of lncRNAs: Building Lasting Memories through Long-Distance Transport</b>	<b>Sathyanarayanan V Puthanveetil, PhD</b> University of Florida, Jupiter, Florida, USA .
3:20-4:10 pm, TRT	<i>Presentations (for Accepted Papers) Session 2</i>	
	Long Non-Coding RNA Genes ANRIL, MEG3, and NEAT1 - Novel Players in Childhood Obesity and Insulin Resistance ( <b>15 minutes</b> )	Manar Ammar, Ruba Ali, Mikhail Shkurat, Igor Bulanov, Angela Alexandrova, and Tatiana Shkurat Southern Federal University, Rostov on Don, Russia
	idenLD-AREL: identifying lncRNA-disease associations by random forests based on an ensemble learning framework ( <b>15 minutes</b> )	Yahan Li, Mingrui Zhang, Junliang Shang, Qianqian Ren, Feng Li, and Jin- Xing Liu Qufu Normal University, Rizhao, Shandong, China
	Genetic variations of lncRNA-H19 and miR-125a in association with fetal growth restriction ( <b>10 minutes</b> )	Dema Alset, Moez Eid, Elena Butenko, and Tatiana Shkurat Southern Federal University, Rostov on Don, Russia
	lncRNAs, oxidative stress, and COVID-19. A bioinformatics analysis of potential prognostic biomarkers ( <b>10 minutes</b> )	Moez Eid, Dema Alset, and Tatiana Shkurat, Southern Federal University, Rostov on Don, Russia
4:10-4:25 pm TRT	<b>Break</b>	
4:25-4:50pm TRT	<b>Invited Talk:</b> Characterizing the Molecular Function of the Radiosensitizer Long Non-coding RNAs linc-SPRY3 in Male Lung Cancers	<b>Ivan Martinez, PhD</b> West Virginia University, West Virginia, USA

4:50-5:50 pm TRT	<b>Panel Session:</b> <i>Evolving lncRNA world: Computation Meets Biology</i>	<b>Moderators:</b> Leonard Lipovich, PhD, Wayne State University, USA & Shenzhen Huayuan Biotech, China. Don Adjeroh, PhD, West Virginia University, USA
5:50-6:00pm TRT	<b>Closing Remarks</b>	

<b>Net-AI-BHI The 2nd Workshop on Network Science and Artificial Intelligence for Biomedicine &amp; Health Informatics – Dec. 7th</b> <i>Pietro Hiram Guzzi, Manuela Petti, Paola Stolfi, Paolo Tieri</i>		
Time	Title	Presenter/Author
9.00-9.10	Welcome and presentation of the workshop	Pietro Hiram Guzzi, Manuela Petti, Paola Stolfi, Paolo Tieri
9.10-9.30	Statistical Measurement Analysis of the Efficiency of Traditional Chinese Medicine Hospitals	<u>Yan Wang</u> and Ruyi Zhang
9.30-9.50	KtreeBnIp: An Efficient Epistasis Mining Approach Using K-tree Optimizing Bayesian Network	Keqin Li, Xuan Yang, Ao Xie, Yulong Kan, Xu Wang, Junli Deng, and <u>Jianxiao Liu</u>
9.50-10.10	A Network Analysis Approach for the Classification of Psychiatric Disorders Using Multi-Modal Data	<u>Rama Krishna Thelagathoti</u> and Hesham H. Ali
10.10-10.30	Integrating Genomic and Transcriptomic data of checkpoint blockade response in Non-Small Cell Lung Cancer through Multilayer Network Modelling	<u>Davide Mascolo</u> and Manuela Petti
10.30-10.50	Stratification of metastatic melanoma patients based on mutational signatures	<u>Caterina Alfano</u> , Lorenzo Farina, and Manuela Petti
10.50-11.20	<b>Coffee Break</b>	
11.20-11.40	A novel Network-based Algorithm for Improving Triage of Patients	Pietro Hiram Guzzi, <u>Annamaria Defilippo</u> , and Pierangelo Veltri
11.40-12.00	Structural Connectivity Analysis in Cognitive Decline: Insights from Graph Theory and Mass-Spring Modeling	Abdulyekeen Adebisi, Ho-Won Lee, and <u>Kalyana Veluvolu</u>
12.00-12.20	Injective Aggregation to Improve Blood-Brain Barrier Permeability Prediction	Jidin Dinesh, Rahul Krishnan Pathinarupothi, and K.P. Soman
12.20-12.40	Transformer and Snowball Graph Convolution Learning for Brain Functional Network Analysis	<u>Jinlong Hu</u> , Yangmin Huang, and Shoubin Dong
12.40-12.50	<b>Closing Remarks</b>	

<b>The 7th International Workshop on Deep Learning in Bioinformatics, Biomedicine, and Healthcare Informatics (DLB2H 2023)</b> <i>Workshop Chairs: Jung Hun Oh and Mingon Kang</i>		
Istanbul Time Dec. 5, 2023	Title	Presenter/Author
8:00 am- 8:15	MoTIF: a Method for Trustworthy Dynamic Multimodal Learning on Omics	Yuxing Lu
8:15-8:30	DeepDualEPI: Predicting Promoter-Enhancer Interactions Based on DNA Sequence and Genomic Signals	Haonan Song
8:30-8:45	CTCM: Clustering based on three correlation matrices for multi-omics data integration and cancer subtype identification	Shihao Zhang
8:45-9:00	A Machine Learning Approach for Predicting Microsatellite Instability using RNA-seq	Miguel Simões
9:00-9:15	Cryptic binding site prediction with protein language models	Vít Škrhák
9:15-9:30	Adaptive Multi-modal Data Fusion Method for Dermatitis Diagnosis	Li Yaning

9:30-9:45	<b>Coffee Break</b>	
9:45-10:00	Knee Joint Protection: Effect of Foot Pressure Position on Rectus Femoris EMG during Squats	Jintak Choi
10:00-10:15	Entity Category Intersection over Union: A Loss for Biomedical Nested Entity Recognition	Jian Zhang
10:15-10:30	A Factual Aware Two-Stage Model for Medical Dialogue Summarization	Fengyu Lu
10:30-10:45	ASD-GRes <sup>TM</sup> : Deep Learning Framework for ASD classification using Gramian Angular Field	Fahad Almuqhim
10:45-11:00	Inferring DTI Using Knowledge Graph with MCRWR and Attention Mechanism	Xiaoli Lin
11:00-11:15	Non-rigid Medical Image Registration Based on Unsupervised Self-driven Prior Fusion	Yucheng Shu
11:15-11:30	MTr-Net: A multipath fusion network based on 2.5D for medical image segmentation	Fengyi Xia
	<b>Closing Remarks</b>	

<b>Machine Learning and Artificial Intelligence in Bioinformatics and Medical Informatics (MABM2023)</b> <i>Tuesday, December 5<sup>th</sup>, 2023, MR23, Hilton Istanbul Bomonti Hotel</i> <i>Chair: Dr. Haiying Wang</i>		
<b>Time (PST Time)</b>	<b>Title</b>	<b>Presenter/Author</b>
8:55 – 9:00am	Opening Remarks	
9:00 – 9:20am	<b>S08214</b> : Data analytics framework for sparse longitudinal structured biomedical data	Ivana Sixtová, Tomáš Skopal, and Tomáš Uher
9:20 – 9:40am	<b>S08217</b> : Evaluating SHAP's Robustness in Precision Medicine: Effect of Filtering and Normalization	Masrur Sobhan and Ananda Mondal
9:40 – 10:00am	<b>B2012</b> : Mr. Clean: An Ensemble of Data Cleaning Algorithms for Increased Data Retention	Kenneth Smith and Sharlee Climer
10:00 – 10:20am	<b>Coffee Break</b>	
10:20 – 10:40am	<b>B768</b> : Gaussian Process-based Active Learning for Efficient Cardiovascular Disease Inference	Stavroula C. Tassi, Konstantinos D. Polyzos, Dimitrios I. Fotiadis, and Antonis I. Sakellarios
10:40 – 11:00am	<b>B749</b> : Integrating Automatic Temporal Relation Graph into Multi-Task Learning for Alzheimer's Disease Progression Prediction	Menghui Zhou, Xulong Wang, Yu Zhang, Tong Liu, Kang Liu, and Po Yang
11:00 – 11:20am	<b>B494</b> : Machine Learning Models for Prediction of Joint Infections Following Hip Replacement Surgery	Hilal Maradit Kremers, Sunghwan Sohn, and Walter Kremers
11:20 – 11:40am	<b>B776</b> : A Practical Approach to Disease Risk Prediction: Focus on High-Risk Patients via Highest-k Loss	Hongyi Yang, Rich Gonzalez, Brahmajee Nallamothu, Keith Aaronson, Kevin Ward, Alfred Hero, and Sardar Ansari
11:40 – 12:00	<b>B660</b> : Employing Nudge Theory and Persuasive Principles with Explainable AI in Clinical Decision Support	Seda Polat Erdeniz, Thi Ngoc Trang Tran, Alexander Felfernig, Diether Kramer, Michael Schrempf, and Peter Rainer
12:00 – 12:20	<b>B220</b> : Investigating Potential Natural Antibiotics Plants Based on Unani Formula Using Supervised Network Analysis and Machine Learning Approach	Ahmad Kamal Nasution, Naoaki Ono, Shigehiko Kanaya, and Md Altaf Ul Amin
<b>12:30 – 14:00</b>	<b>Lunch Break</b>	
2:00 – 2:20pm	<b>B2104</b> : Emergency Department Wait Time Forecast based on Semantic and Time Series Patterns in COVID-19 Pandemic	Zhaohui Liang, Zhiyun Xue, Yang Feng, Sivaramakrishnan Rajaraman, Jimmy Xiangji Huang, and Sameer Antani



2:20 – 2:40pm	<b>S08213:</b> A Novel Mixed Effects Random Forest Approach for Predicting Dairy Cattle Methane Emissions	Stephen Ross, Haiying Wang, Huiru Zheng, Tianhai Yan, and Masoud Shirali
2:40 – 3:00pm	<b>B980:</b> Towards Learning-based Surgical Planning of Glioma Resection via a Contrastively Constrained Siamese Neural Network	wenqi shan, yingjie guo, lianying chao, haobo zhang, xudong li, xuan wang, qiang li, and zhiwei wang
3:00 – 3:20pm	<b>B1079:</b> Prediction of DILI in Humans: Investigating Opportunities in DILIst Data, Chemical Features, Machine Learning and Rule-Based Methods	Advait Nila Narayanan, SHYAM SUNDAR DAS, and Minalinee T.T.
3:20 – 3:40pm	<b>B226:</b> The application of object detection in the surgical scene of thyroidectomy	Xinyu Liu, Xiaoguang Lin, Qilong Sun, Xiang Liu, and Jun Wu
3:40 – 4:00pm	<b>B1103:</b> Detecting Semantic Similarity of Diseases based Machine Learning	Emma Qumsiyeh, Zaidoun Salah, Rashid Jayousi, and Malik Yousef
4:00 – 4:20pm	<b>Coffee Break</b>	
4:20 – 4:40pm	<b>S08210:</b> A Study on Reducing Big Data Image Annotation Burden Through Iterative Expert-In-The-Loop Strategy	Evanjelin Mahmoodi, Zhiyun Xue, Sivaramakrishnan Rajaraman, and Sameer Antani
4:40 – 5:00pm	<b>S08202:</b> scNMF-Impute: imputation for single-cell RNA-seq data based on nonnegative matrix factorization	Juan Wang, Na-Na Zhang, Jun-Liang Shang, and Jin-Xing Liu
5:00 – 5:20pm	<b>S08216:</b> miRcorrNetPro: Unraveling Algorithmic Insights through Cross-Validation in Multi-Omics Integration for Comprehensive Data Analysis	Miray Unlu Yazici, J. S. Marron, Burcu Bakir-Gungor, and Malik Yousef
5:20 – 5:40pm	<b>B2038:</b> Prediction of Non-coding Driver Mutations Using Ensemble Learning	Sana Basharat, Ramal Hüseyinov, Hüseyin Hilmi Kılınc, and Burçak Otlu
5:40-6:00pm	<b>B824:</b> Wavelet-aware Transformer Network for Multi-contrast Knee MRI Super-resolution	Zexin Ji, Xiaoyan Kui, Shenghui Liao, Chengzhang Zhu, Yang Li, Yulan Dai, and Beiji Zou
	<b>Closing Remarks (Day 1)</b>	

## Machine Learning and Artificial Intelligence in Bioinformatics and Medical Informatics (MABM2023)

*Day 2, Online (Video) Session, December 6<sup>th</sup>, 2023, Istanbul, Turkey*

*The link to watch the papers in the MABM2023 video session is:*

<https://www.youtube.com/watch?v=1A9d1-398H4&list=PLX1sJCjAD9VW0K>

*Chair: Dr. Haiying Wang/Prof. Huiru(Jane) Zheng*

Paper ID	Title	Presenter/Author
<b>S08205</b>	Using Deep Learning to differentiate between Parkinson's Disease and Multiple System Atrophy based on PET and MRI images	Hongyun Tan, Binbin Luo, and Chao Cong
<b>S08207</b>	Attention Based Approach for Molecular Property Prediction	Tuan Tran and Chinwe Ekenna
<b>S08212</b>	Adaptive Thresholding based on Multi-task Learning for Refining Binary Medical Image Segmentation	Qin Lei, Jiang Zhong, Rongzhen Li, Chen Wang, and Qizhu Dai
<b>S08215</b>	On a Survival Gradient Boosting, Neural Network and Cox PH based Approach to Predicting Dementia Diagnosis Risk on ADNI	Henry Musto, Daniel Stamate, Doina Logofatu, and Lahcen Ouarbya
<b>S08219</b>	A Factor Graph Based Indoor Localization Approach for Healthcare	Shiyu Zheng, Ziheng Zhou, Qi Zhang, Shanshan Zhang, Ao Peng, Lingxiang Zheng, Huiru Zheng, and Haiying Wang
<b>S08206</b>	BrainPST: Pre-training Stacked Transformers for Dynamic Brain Functional Network Analysis	Jinlong Hu, Yangmin Huang, Yi Zhuo, and Shoubin Dong
<b>B246</b>	Construction of Nursing Sequential Decision Knowledge Graph from the Perspective of International Standard Terminology	Yulong Fang, Yue Sun, Zejing Wang, Daxiong Xu, Hao Zhou, and Huazhen Wang
<b>B555</b>	MFGB: Molecular Properties Prediction leveraging Self-supervised Morgan Fingerprint Representation Learning	Shuyan Fang, Yu Liu, and Song Liu

<b>B775</b>	DDFormer: Dual-domain and Dual-aggregation Transformer for Multi-contrast MRI Super-resolution	Xiaoqian Huang, Pingping Zhang, Jiaxun Song, Qin Huang, Caixia Huang, and Detian Huang
<b>B598</b>	Stature estimation using measurements of the skull in Chinese populations	Yang Wen, Yan Dengwei, Zhou Mingquan, Geng Guohua, and Liu Xiaoning
<b>B829</b>	Mode Collapse Alleviation of Reinforcement Learning-based GANs in Drug Design	Zongli Jiang, Zhenbo Wang, Jinli Zhang, Man Wu, Chen Li, and Yoshihiro Yamanishi
<b>B892</b>	Semi-supervised meibomian gland segmentation via mutual consistency constraints and uncertainty rectification	Jiawen Lin, Feng Lu, Li Li, Lingjie Lin, Dongqi Li, Glen M. Borchert, and Jingshan Huang
<b>B986</b>	Enhancing Medical Language Understanding: Adapting LLMs to the Medical Domain through Hybrid Granularity Mask Learning	Longjun Fan, Xiaohong Liu, Yuhao Wang, Guoxing Yang, Zongxin Du, and Guangyu Wang
<b>B1039</b>	Blood Pressure Estimation from Single Photoplethysmogram via Multi-modal Data Generation and Feature Fusion using Deep Learning	Tao Liu, Lin Shu, Yeyi Guan, Zhejun Zeng, Wenxuan Wu, Jianhui Yan, and Dongzi Shi
<b>B1044</b>	Counterfactual-Integrated Gradients: Counterfactual Feature Attribution for Medical Records	Jamie Duell, Monika Seisenberger, and Xiuyi Fan
<b>B1122</b>	Sparse Linear Centroid-Encoder: A Biomarker Selection tool for High Dimensional Biological Data	Tomojit Ghosh, Karim Karimov, and Michael Kirby
<b>B2035</b>	Enhancing Depression Detection from Narrative Interviews Using Language Models	Palak Sood, Xinming Yang, and Ping Wang
<b>B2075</b>	MLNet: Enhancing Joint Predictive Modeling of Chronic Diseases Using Deep Learning	Changjing Song, Zhanpeng Luo, Li Lu, and Qian Su
<b>B2080</b>	Genomic Databases Homogenization with Machine Learning	Míriam Barrabés, David Bonet, Víctor Novelle Moriano, Xavier Giró-i-Nieto, Daniel Mas Montserrat, and Alexander G. Ioannidis
<b>B2135</b>	Crow Search Algorithm Based on Information Interaction for Epistasis Detection	Yaxuan Zhang, Junliang Shang, Yijun Gu, Qianqian Ren, Daohui Ge, and Yan Sun
<b>B628</b>	Joint Learning-based Multiple Documents Heterogeneous Graph Inference for Biomedical Entity Linking	Qizhu Dai, Jiang Zhong, Chen Wang, Hong Yin, Qin Lei, Xue Li, and Rongzhen Li
<b>B239</b>	MLQP: A Machine Learning Based Quadratic Prediction Method for MiRNA-Disease Associations	Xu Wang, Ling-Yun Dai, Jin-Xing Liu, and Shuang Wang
<b>B956</b>	Spectral clustering based on multi-similarity learning method for single-cell RNA-seq data	Lianlian Zhang, Qianqian Ren, Xiangzhen Kong, Shaoyi Liu, Junliang Shang, and Feng Li
<b>B1000</b>	FMRI-Guided Time-Symmetric Joint Model for Visual Attention Prediction	Yaonai Wei, Tuo Zhang, Han Zhang, Chong Ma, Songyao Zhang, Zhibin He, Tianyang Zhong, Li Yang, Muheng Shang, Lei Du, Tianming Liu, and Junwei Han

<b>WS#13. Machine Learning for Biological and Medical Image Big Data</b>		
<i>Workshop Chairs: Fa Zhang, Xuefeng Cui</i>		
<b>Time</b>	<b>Title</b>	<b>Presenter/Author</b>
8:30-8:50am	Adversarial U-Net for Predicting Blood Oxygen Level-Dependent Time Series	Bin Hu
8:50-9:10am	An End-to-End Multi-stage Network for Ultrasound Video Object Segmentation	Mei Wang
9:10-9:30am	ConTNet: cross attention convolution and Transformer for aneurysm image segmentation	Shudong Wang
9:30-9:50am	DCNet Densely Connected Neural Network with Global Context for Abnormalities Prediction in Bronchoscopy Images	Ying Wang
9:50-10:10am	FF-MSPAM: A Multi-scale Parallel Attention Mechanism based Feature Fusion Model for Diagnosis of Parkinson's Disease	Shixiao Shan
10:10-10:30am	Graph Convolutional Network with Neural Inductive Matrix Completion for Predicting Disease-Related LncRNA Genes	Suyu Dong
10:30-10:50am	<b>Coffee Break</b>	

10:50-11:10am	Keypoint-Driven Unsupervised Learning for Histopathology Image Registration	Oezdemir Cetin
11:10-11:30am	Learning-disability recognition by using sparse spatio-temporal graph neural networks	Yupei Zhang
11:30-11:50am	Med-DualNet: Enhancing Medical Image Segmentation with Hard-Patch Mining and Joint Error Adjustment	Xiaoqin Tang
11:50-12:10pm	MGFuseSeg: Attention-Guided Multi-Granularity Fusion for Medical Image Segmentation	Guoping Xu
12:10-12:30pm	MSCAP: DNA Methylation Age Predictor based on Multiscale Convolutional Neural Network	Li Zhang
12:30-2:00pm	<b>Lunch Break</b>	
2:00-2:20pm	PFCA-Net: a post-fusion based cross-attention model for predicting PCa Gleason Group using multiparametric MRI	Xinglong Wu
2:20-2:40pm	Predicting Tertiary Lymphoid Structures in Head and Neck Contrast-Enhanced CT Images using a 3D CNN	Juan Liu
2:40-3:00pm	Prediction of Oncology Drug Targets Based on Ensemble Learning and Sample Weight Updating	Juan Wang
3:00-3:20pm	Self-Supervised Rotation Learning for 3D Segmentation on Nasopharyngeal Carcinoma MRI Images	Xiaojuan Ban
3:20-3:40pm	Synergistically Learning Class-specific Tokens for Multi-class Whole Slide Image Classification	Wei Wang
3:40-4:00pm	Temporally-Extended Prompts Optimization for SAM in Interactive Medical Image Segmentation	Chuyun Shen
	<b>Closing Remarks</b>	

## WS#9 - 14<sup>th</sup> Int.Workshop on High Performance Bioinformatics and Biomedicine (HiBB-2023)

*Workshop Organizer: Mario Cannataro,*

*Workshop Chairs: Pietro Cinaglia, Marianna Milano*

*Wednesday, December 6, 2023*

*The workshop schedule is based on Istanbul Time*

**Room: MR16**

<b>Time</b>	<b>WS#9 - High Performance Bioinformatics and Biomedicine (HiBB-2023)</b>	<b>Presenter/Author</b>
8:30-8:50	S09201 High performance computing requirements for the calculation of a morphology model of the human whole brain at the nanoscale	Wieslaw Nowinski
8:50-9:10	S09203 Use Predictive Learning Model to Tackle Data Breaches in Healthcare Domain	Giuseppe Agapito, Mario Cannataro, Pietro Cinaglia, Gaetano Guardasole, and Marianna Milano
9:10-9:30	S09204 MEEG-Transformer: Transformer Network based on Multi-domain EEG for Emotion Recognition	Haoxuan Sun, Liying Yang, Qiang Wang, Dunhui Liu, and Pei Ni
<b>Coffee Break</b>	<b>Coffee Break (9:45-10:00)</b>	
10:00-10:20	S09205 LC-SegDiff: Label-Constraint Diffusion Model for Medical Image Segmentation	Yonghan Lu, Chengjian Qiu, Qiaoying Teng, Jun Chen, Robert Free, Lu Liu, Yuqing Song, and Zhe Liu
10:20-10:40	S09206 Acceleration of BAM I/O on distributed file systems	Satoshi Ito, Satoru Miyano, and Kenji Ono
10:40-11:00	S09207 Explanation of machine learning models for predicting obesity level using Shapley values	Lorella Bottino and Mario Cannataro

11:00-11:20	B291 UCAPF: A Unified Processing Platform for Large-scale Virtual Screening	Jiaqi He, Yangyang Li, Xu Zhou, Yuan Gao, Zhuoya Wang, Hong Guang, Weidan Wang, Yujie Dong, and Liu Hao
11:20-11:40	B421 Comparing Spike Sorting Algorithms on Simulated Extracellular Multi-Electrode Array Recordings	Chenhao Bao and Adam Charles
11:40-12:00	B773 PairHMM Improvements for Modern Instruction Set Architectures	Roman Snytsar
12:00-12:20	B1031 Molecular modeling approaches in identification of novel RAGE inhibitors for the treatment of Alzheimer's disease	Inderjeet Bhogal, Vaishali Pankaj, and Sudeep Roy
12:20-12:40	B1988 Energy Efficient AI/ML based Continuous Monitoring at the Edge: ECG and EEG Case Study	Umair Mohammad and Fahad Saeed
<b>Lunch Break</b>	<b>Lunch Break Lunch provided by Conference (12:30pm – 2:00pm)</b> <b>Location: Globe Restaurant</b>	

## WS#10 4<sup>th</sup> International Workshop on High Performance Computing Methods and Interdisciplinary Applications for Fighting the COVID-19 Pandemic (HPC4COVID-19)

*Workshop Organizers: Mario Cannataro, Giuseppe Agapito, Mauro Castelli, Riccardo Dondi, Rodrigo Weber dos Santos, Italo Francesco Zoppis,*

*Workshop Chairs: Pietro Cinaglia, Marianna Milano*

*Wednesday, December 6, 2023*

*The workshop schedule is based on Istanbul Time*

*Room: MR17*

Time	WS#10 High Performance Computing Methods and Interdisciplinary Applications for Fighting the COVID-19 Pandemic	Presenter/Author
4:00pm-4:20pm	S10201 Predicting COVID-19 Severity Using a Cut-and-Solve Feature Selection Approach	Kenneth Smith, Michael Chan, John Brandenburg, Katarina Jones, Shawn Campagna, Michael Garvin, Alan Templeton, Daniel Jacobson, Carlos Cruchaga, and Sharlee Climer
4:20pm-4:40pm	S10202 A Semantic FAIRness Framework for Epidemiological Analysis of Covid-19 Data in UAE	Haleema Al Sabbah, Anoud Bani Hani, Nawel Bessadet, and Oluwasegun Adedugbe
4.40pm-5.00pm	B440 COVID-19 incidence estimates and forecast by metaprediction for the Comunidad de Madrid	Aymar Cublier Martineau, Mario Muñoz Organero, David Morilla, Diana González Barroso, and David E. Singh
5:00pm-5:20pm	B502 IMT-LUSS: A Novel Inception Meets Transformer-based Lung Ultrasound Scoring Model in Pneumonia	Yiwen Liu, Wenyu Xing, Chao He, Wenfang Li, Jiangang Chen, and Mingbo Zhao
5:20pm-5:40pm	B1987 Personalized COVID-19 Early Detection Using Wearable Data Based on Self-Reported Records	Cheng Ding, David Lin, ZeWei Lei, Jayden Myers, Wenqi Shi, Benoit Marteau, and May Wang
5:40pm-6:00pm	B2062 A Mechanistic Basis for the Analysis of SARS-CoV-2 Omicron Variant Severity	Aarav Arora, Kavitha Mukund, and Shankar Subramaniam
	<b>Concluding Remarks</b>	

## Workshop on challenges and opportunities in Network Medicine and Multi-Omics bioinformatics' approaches for studying human complex diseases

*Workshop Chairs: Paola Paci, Giulia Fiscon, Federica Conte*

Time	Title	Presenter Author
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First session: 9.00-10.00		
9.00	Overview of bioinformatic tools to study viral infections	Verdiana Zullan
9.20	The identification of microRNAs associated with immune response pathways modulated by ORF8 during SARS-CoV-2 infection: a preliminary in silico analysis.	Silvia Pauciullo
9.40	Network-based analysis to uncover drug-induced adverse side-effects	Martina Brunetti
10.00-10.20	Coffee Break	
Second session: 10.20-11.20		
10.20	A single-cell transcriptomic analysis of Neuroblastomas revealed a selective cGAS-STING pathway suppression in malignant cells	Pasquale Sibilio
10.40	Auto-GO: Reproducible, Robust and High Quality Ontology Enrichment Visualizations	Matteo Pallocca
11.00	Network-based analysis to uncover drug-induced adverse side-effects	Alessio Funari
Third session 11.20-12.40		
11.20	SAMMS: Multi-modality Deep Learning with the Foundation Model for the Prediction of Cancer Patient Survival	Wen Zhu
11.40	Disease Treatment Key Genes Identification In Heterogeneous Interaction Networks	Bingbo Wang
12.00-12.30	Closing Remarks	

The Seventh Workshop on Computational Methods for the Immune System Function (CMISF 2023)		
Date, Time: Dec, 6 <sup>th</sup> 2023 – 14:00-18:00		
Workshop Chairs: Francesco Pappalardo, Giulia Russo, Marzio Pennisi		
Time	Title	Presenter/Author
14:00	<b>Welcome message</b>	
14:05	<i>S15201, "Predictive Modelling of Allergic Responses to Chemical Sensitizers: Distinguishing Skin and Respiratory Reactions"</i>	Giulia Russo
14:20	<i>S15203, "Universal Immune System Simulator Analysis: The Impact of the Variable Approach Technique® on Enhancing Immune Defense Against infectious diseases"</i>	Francesco Pappalardo
14:35	<i>S15204, "Enhancing Multiple Sclerosis Lesion Segmentation in Multimodal MRI Scans with Diffusion Models"</i>	Sebastiano Battiato
14:50	<i>S15205, "MASFENON: Multi-Agent Adaptive Simulation Framework for Evolution in Networks of Networks"</i>	Giorgio Locicero
15:05	<i>S15207, "Machine Learning techniques application to predict the quality of life degree in breast cancer patients"</i>	Valentina Di Salvatore
15:20	<i>S15208, "Genetic Algorithm-Based Prediction of Emerging SARS-CoV-2 Variants: A Computational Biology Perspective"</i>	Avisa Maleki
15:35	<i>S15209, "Modeling Cutaneous Leishmaniasis: Insights into M1/M2 Macrophage Dynamics Using the Universal Immune System Simulator"</i>	Elena Crispino
15:50	<i>S20210, "Understanding the Dynamics of the Proliferative Phase in Burn Wound Healing: A Computational Model"</i>	Roland V. Bumbuc
16:00-16:15	<b>Coffee break</b>	
16:15	<i>S15211, "OmniReproducibleCellAnalysis: a comprehensive toolbox for the analysis of cellular biology data "</i>	Dora Tortarolo
16:30	<i>S15212, "Modeling and Simulation of anakinra effects on severe COVID19 Patients "</i>	Marzio Pennisi
16:45	<i>B719, "Structural Homology of Epitope Binding Mimicry in the Onset of Type 1 Diabetes Mellitus "</i>	Ryan Gardner
17:00	<i>B838, "Abstract Functional Analysis Identifies New Microglial Subtypes at Single Cell Level in Alzheimer's Disease"</i>	Chenyu Zhang

<b>17:15</b>	<i>B1017, "Harnessing computational models to uncover the role of the immune system in tuberculosis treatment "</i>	Enrico Mastrostefano
<b>17:30</b>	<b>Closing Remarks</b>	

The 14th Workshop on Integrative Data Analysis in Systems Biology (IDASB 2023)		
Workshop Chairs: Huiru (Jane) Zheng, Zhongming Zhao, Ming Xiao		
Time	Title	Presenter/Author
8:55 – 9:00	Workshop Opening	
9:00 – 9:20	Utilizing Genetic Programming to Enhance Polygenic Risk Score Calculation(S16206)	Martin Hurta, Jana Schwarzerova, Thomas Naegele, Wolfram Weckwerth, Valentine Provaznik, and Lukas Sekanina
9:20 – 9:40	A Multi Target Drug Design Method Based on Transformer and LSTM (B653)	Haoran Liu, Xiaolong Zhang, Xiaoli Lin, and Jing Hu
9:40 – 10:00	Anti-3CLpro Molecular Design Based on the Model Constrained by DTIs with AIS Tokenization (B1010)	Xuan Liu, Xiaoli Lin, and Xiaolong Zhang
10:00-10:20	Coffee Break	
10:20 – 10:40	Simulations of the insulin-like growth factor receptor signaling pathway with randomly sampled parameters (S16204)	Yan Yan, Xinan Zhang, and Tianhai Tian
10:40 – 11:00	Bayesian Approach Integrating Prior Knowledge for Identifying miRNA-mRNA Interactions in Hepatocellular Carcinoma (B1121)	Yichen Guo, Marie Dennis, Rency Varghese, Sidharth Jain, Mahlet Tadesse, and Habtom Ressonm
11:00 – 11:20	Modeling of AMPK Regulatory Network in Alzheimer’s Disease (B2029)	Junsheng Wang, Enze Xu, Yang Xiao, Chunrui Xu, and Minghan Chen
11:20 – 11:40	Heteroskedasticity as a Signature of Association for Age-Related Genes (B417)	Salman Mohamadi and Donald Adjeroh
11:40 – 12:00	Multi-scale convolutional neural networks for brain disease diagnosis(S16202)	Zhongyi Hu, Libin Gao, Yinsheng Tong, Xingjin Lu, Rui Li, Lei Xiao, and Zuoyong Li
Closing Remarks		
12:00-14:00	Lunch Break	
Afternoon: offsite video presentation		
14:00 – 14:20	PLNorm: A Power-Law Distribution-Based Normalization Method for Single-Cell Hi-C Data Analysis (B2043)	Bin Zhao and Lu Liu
14:20 – 14:40	Characterization of oncogenes and tumor suppressor genes targeted by onco-microRNAs and tumor suppressor microRNAs in kidney cancer (S16208)	Claire Shen and Yongsheng Bai
14:40 – 15:00	Characterizing Racial Disparity in Cancers by Predicting Candidate Biomarker (S16205)	Judy Bai, Daniel Zhou, and Yan Guo
15:00 – 15:20	Ranking Metrics for Genomic Regions (S16207)	Arpita Joshi
15:20 – 15:40	Identification of Key Biomarkers Associated with Ductal Breast Cancer in Spatial Transcriptomics Data (B259)	Ellie Xi, Tutu Hu, Chloe Yu, Lulu Shang, Xiang Zhou, and Yongsheng Bai,
15:40 – 16:00	Assessing Tree-Based Phenotype Prediction on the UK Biobank (B2085)	Alex Meléndez, Cayetana López, David Bonet, Gerard Sant, Ferran Marqués, Daniel Mas Montserrat, Jordi Abante, and Alexander G. Ioannidis
16:00 – 16:20	Enhancing ProteinBERT: Integrating Intrinsically Disordered Proteins for Comprehensive Proteomic Predictions (B2128)	Jewelle Stone, Habib Boloorchhi Tabrizi, and Rittika Shamsuddin



## Artificial Intelligence Based Multimodal Medical Diagnosis

*Workshop Chairs: Zhuo Liu and Liang Zhao*

Time	Title	Presenter/Author
8:30-8:45	Biomarker discovery using multimodal data with the potential application in lung tumor diagnosis	Ruhao Liu, Kai Wang, Shuling Wang, and Qingchen Zhang
8:45-9:00	SWT-UNet: Medical Image Segmentation Based on Multi-modality UNet with Sliding Window Transformer Block	Yangqianhui Zhang, Dong Han, Xiaoming Gang, Jiajun Ma, and Xu Yuan
9:00-9:15	Visualization Analysis of Tongue Syndrome Diagnosis by Interpretability Neural Networks	Qingfeng Wu, Shan Cao, Lu Cao, and Qunsheng Ruan
9:15-9:30	Concept-level recognition from neuroimages for understanding learning in the brain	Yiping Zhang, Liqian Sun, Jingheng Wang, Yan Shen, Yupei Zhang, and Shuhui Liu
9:30-9:45	PMDF: Preference-based Multimodal Deep Forest for Overall Survival Prediction in Gastric Cancer	Zhikui Chen, Qiucen Li, Tianyi Ma, Zedong Du, Huicen Guo, and Yang Tian
9:45-10:00	<b>Coffee Break</b>	
10:00-10:15	Attention-based BRCNN for Chinese Medical Question Answering	Ruilin Qi, Hang Li, and Qingchen Zhang
10:15-10:30	Radiomics-Dosimetrics-Contourimetrics Collaborative Learning for Adaptive Radiotherapy Eligibility Prediction in Nasopharyngeal Carcinoma	Yuanpeng Zhang, Saikit Lam, Chengyu Qiu, Jiang Zhang, Xinzhi Teng, and Jing Cai
10:30-10:45	Medical Extractive Question-Answering Based on Fusion of Hierarchical Features	Yang Tian, Zhikui Chen, Jinqiao Yang, Bo Xu, Zhendong Guo, Xu Zhang, Hao Ren, Qiucen Li, and Mei Sun
10:45-11:00	IMAN: An Iterative Mutual-Aid Network for Breast Lesion Segmentation on Multi-modal Ultrasound Images	Xiaozheng Xie, Chen Chen, Xuefeng Liu, Yong Wang, Rui Wang, and Jianwei Niu
11:00-11:15	A Latent Adversarial Cauchy-Schwarz Autoencoder for Medical Image Segmentation	Jianing Zhang, Zhikui Chen, Yingshu Liu, Jing Gao, Junyang Zhou, and Peng Li
11:15-11:30	Virtual Screening of Iridoids SGLT2 Inhibitors Based on Molecular Docking and Pharmacophore Model	Dajin Zhang, Tong Xin, Xiangyan Xu, Yudong Wang, Meiyun Shi, Yajun Liu, Ruixin Ma, and Hongyu Xue
<b>Closing Remarks</b>		

## Workshop in

**Artificial Intelligence Techniques for BioMedicine and HealthCare**

**AIBH@BIBM2023**

**December 5, 2023**

**Workshop Chairs: Ester Zumpano, Pierangelo Veltri, Luciano Caroprese**

Time	Title	Presenter/
<b>8:00</b>	<b>Workshop Introduction</b>	
	<b>Session 1 (online) Chair: Ester Zumpano</b>	
8:00	<b>S21211</b> Muskan Garg, Xingyi Liu, Maria Vassilaki, Ronald C Petersen, Jennifer St. Sauver, and Sunghwan Sohn, <i>Navigating Sex-Specific Disease Dynamics in Incident Dementia</i>	Muskan Garg, Xingyi Liu, Maria Vassila Sauver, and Sunghwan Sohn,
8:15	<b>S21212</b> <i>PatchBMI-Net: Lightweight Facial Patch-based Ensemble for BMI Prediction</i>	Parshuram Aarotale, Twyla Hill, and Ajit
8:30	<b>S21210</b>	Yunzhe Xue, Andrew Hu, Rohit Muralid and Usman Roshan

	<i>An AI system for evaluating pass fail in fundamentals of laparoscopic surgery from live video in realtime with performative feedback</i>	
	<b>Session 2(online) Chair: Luciano Caroprese</b>	
8:45	<b>S21214</b> <i>Development of Interpretable Machine Learning Models for COVID-19 Drug Target Docking Scores Prediction</i>	Wenqi Shi, Mio Murakoso, Xiaoyan Guo
9:00	<b>S21217</b> <i>Using annotation for computerized support for fast skimming of cardiology electronic health record notes</i>	Shuxin Zhou, Mahshad Khoohi H. Dehkhoda, Andrew J. Einstein, Gai Elhanan, Vipina
9:15	<b>B245</b> <i>The Secondary Isolated Data Island: Isolated Data Island Caused by Blockchain in Federated Learning</i>	Chenghan Wang, Shanshan Wang, Chao Cao, Yadi Han, Limei Huang, and Zhen
9:45	<b>B659</b> <i>Design and Verification Of an Aromatherapy Feedback System for Mental Fatigue Based on Physiological Signals</i>	Tao Sun, Fuze Tian, Hua Jiang, Qinglin
	<b>Session 3 (in presence) Chair: Elio Masciari</b>	
10:30	<b>B1996</b> <i>Incremental Semi-Supervised Tri-Training: a framework for model personalization</i>	<b>Medha Chippa</b> and Farnoush Banaei-K
10:45	<b>B2066</b> <i>Segment Anything Model (SAM) for Medical Image Segmentation: A Preliminary Review</i>	<b>Leying Zhang</b> , Xiaokan
11:00	<b>S21202</b> <i>Electronic Near Point of Convergence: A Tool to Aid the Assessment of Concussion</i>	Bo Liang, Leslie Prichep, Saloni Kanakia, Covassin, Robert Elbin, Gillian Hotz, Je
11:15	<b>S21215</b> <i>Towards Trustworthy Collaborative Healthcare Data Sharing</i>	<b>Muhammad Firdaus</b> and Kyung-Hyune
	<b>Session 4 (in presence) Chair: Muhammad Firdaus</b>	
11:30	<b>S21207</b> <i>Different Algorithms (Might) Uncover Different Patterns: A Brain-Age Prediction Case Study</i>	<b>Tobias Ettling</b> , Sari Saba Sadiya, and
11:45	<b>B643</b> <i>Confident-CAM: Improving Heat Map Interpretation in Chest X-Ray Image Classification</i>	<b>Joana Rocha</b> , Sofia Pereira, Aurélio Ca
12:00	<b>B218</b> <i>Predicting Knee Osteoarthritis Pain Severity through A Deep Hybrid Learning Model: Data from the Osteoarthritis Initiative</i>	Yun Xin Teoh, <b>Alice OTHMANI</b> , Siew L
	<b>Lunch</b>	
	<b>Session 5 (in presence) Chair: Alice Othmanl</b>	
14:00	<b>B1048</b> <i>Multi-Cohort Evaluation of an Automated Sleep Stage Detection Methodology Using ECG and Respiration Signals</i>	<b>Kostas Tsiouris</b> , Styliani Zelilidou, Foiv
14:15	<b>B386</b> <i>Named Entity Recognition in Italian Lung Cancer Clinical Reports using Transformers</i>	<b>Domenico Paolo</b> , Alessandro Bria, Car
14:30	<b>B449</b> <i>Unsupervised extraction, classification and visualization of clinical note segments using the MIMIC-III dataset</i>	<b>Petr Zelina</b> , Jana Halámková, and Vít M



<b>15:00 – 16:00</b>	<b>Session 6 (online) Chair: Eugenio Vocaturo</b>	
15:00	<b>B781</b> <i>A Preliminary Investigation into Use of Admission-Recorded Photoplethysmograms for Predicting Hospital Mortality in Children with Confirmed or Suspected Infection in Resource-Poor Settings</i>	Mahan Rahimi, Matthew O. Wiens, Jero Ansermino, and Guy A. Dumont,
15:15	<b>B847</b> <i>A Multichannel CNN-GRU Hybrid Architecture for sEMG Gesture Recognition</i>	Shouliang Song, Anming Dong, Jiguo Y
15:30	<b>B895</b> <i>IIESC-Net: Incorporating Implicit and Explicit Structural Constraints for Hip Joint Landmark Detection in pelvic X-ray</i>	Jing Zhang, Lijun Guo, Lixin Ni, Xiuchao Zhang,
15:45	<b>B2113</b> <i>Enhanced Classification of Snoring Sounds Using Stacked Classifier Models of Machine Learning with SVM-KNN and Deep Learning with RNN-LSTM</i>	Georges El Khoury, Kabalan Chaccour, El Hassani,
<b>16:00 - 16:20</b>	<b>Coffee Break</b>	
<b>16:00 –17:30</b>	<b>Session 3 (online) Chair: Tommaso Ruga</b>	
16:45	<b>B689</b> <i>Forecasting Hospital Mental-Health Admissions with a Novel Hybrid Deep Learning Architecture</i>	Brandon Mossop, Ramprasad Bismil, a
16:45	<b>B689</b> <i>ELF: An End-to-end Local and Global Multimodal Fusion Framework for Glaucoma Grading</i>	Wenyun Li and Chi-Man Pun
17:15	<b>S21218</b> <i>Federated Learning Applications for Breast Cancer</i>	Luciano Caroprese, Tommaso Ruga, E Zumpano,
	<b>Closing Remarks</b>	

<b>2nd Workshop on Foundation of Network Analysis</b> <i>Workshop Chairs: <u>Marianna Milano</u> and <u>Giuseppe Agapito</u></i> <i>Thursday, December 5, 2023</i>		
<b>Time</b>	<b>2nd Workshop on Foundation of Network Analysis</b>	<b>Presenter/Author</b>
2:00pm-2:20pm	<b>S12201A</b> method for modelling and executing customized pipelines in serverless computing	<u>Pietro Cinaglia</u> and Mario Cannataro
2:20pm-2:40pm	<b>S12202</b> AP-1 Network Shared in Pathways of Rheumatoid Arthritis Subtyped Liver-kidney Deficiency Characterize the Pathology	<u>Guang Zheng</u>
2:40pm-3:00pm	<b>S12203</b> Network Community Detection in Connectomics Data using Graph Theory	Leandro González-Montesino, Darian Horacio Grass-Boada, and <u>Rubén Armañanzas</u>
3:00pm-3:20pm	<b>S12205</b> MFF-Net: Multiscale Feature Fusion Network for Skin Lesion Segmentation	<u>Shujun Ren</u> and Yanjun Peng
3:20pm-3:40pm	<b>S12204</b> Leveraging Random Forest and Graph-based Centralities to Predict Yeast Essential Genes	<u>Sadiq Alinsaif</u>

3:40pm-4:00pm	<b>S12207</b> Learning path design on knowledge graph by using reinforcement learning	Jingheng Wang, Yiping Zhang, Liqian Sun, Ying Liu, Wenxin Zhang, and Yupei Zhang
<b>Coffee Break</b>	Coffee Break (4:00pm-4:20pm)	
4:20pm-4:40pm	<b>B767</b> The interaction between mutated DYRK1A and APP suggests a potential target for vascular cognitive impairment.	<u>Melisa Ece Zeylan</u> , Simge Senyuz, Ozlem Keskin, and Attila Gursoy
4:40pm-5:00pm	<b>S12206</b> Modelling a network as a spring system to estimate edge vulnerability	Paola Lecca
	<b>Closing Remarks</b>	

<b>Workshop in Artificial Intelligence &amp; Big Data vs Pandemics AI&amp;BDvsPandemics@BIBM2023 December 5, 2022 WorkshopChairs: Ester Zumpano, Elio Masciari, Andrea Tagarelli, Eugenio Vocaturo</b>		
Time	Title	Presenter/Author
	<b>Workshop Introduction</b>	
	<b>Session 1 (hybrid) Chair: Elio Masciari</b>	
<b>14:00</b>	<b>S14201</b> <i>Estimating the Limits of Organism-Specific Training for Epitope Prediction</i>	Jodie Ashford, Aniko Ekart, and Felipe Campelo,
<b>14:15</b>	<b>S14202</b> <i>Infectious Disease Forecasting using Multivariate Incomplete Time-series: A Hybrid Architecture with Stacked Dilated Causal Convolutions</i>	Brandon Mossop and Quazi Rahman,
<b>14:30</b>	<b>S14203</b> <i>A Coronavirus Cohort Case Study - Dataset Trends using Machine Learning Methods</i>	Edward Kim, Isamu Isozaki, Satvik Tripathi, Lucy Robinson, Noreen Robertson, Vicki Seyfert-Margolis, and Charles Cairns,
<b>14:45</b>	<b>S14204</b> <i>Effective Surrogate Models for Docking Scores Prediction of Candidate Drug Molecules on SARS-CoV-2 Protein Targets</i>	Wenqi Shi, Mio Murakoso, Xiaoyan Guo, Linxi Xiong, Matthew Chen, and May Dongmei Wang,
<b>15:00</b>	<b>B362</b> <i>CEGNet: A Simplified Self Attention Convolutional neural network for Pneumonia Diagnosis</i>	Ji Xurui, Wei Dejian, Zhang Junzhong, Liu Jing, and Cao Hui,
<b>15:15</b>	<b>B1898</b> <i>Uncertainty Aware Ensemble Learning Models for Out of Distribution Medical Imaging Analysis</i>	Junior Ben Tamo, Micky Nnamdi, Lea Lesbats, Wenqi Shi, Yishan Zhong, and May Wang,
<b>15:30</b>	<b>S14205</b> <i>Detection of Day-Based Health Evidence with Pretrained Large Language Models: A Case of COVID-19 Symptoms in Social Media Posts</i>	Keyuan Jiang, Valli Devendra, Soniya Chavan, and Gordon Bernard,
<b>15:45</b>	<b>S14207</b> <i>Single-Cell RNA-Seq Data Clustering: Highlighting Computational Challenges and Considerations</i>	Mohamad Nossier, Sherin M. Moussa, and Nagwa Badr,
<b>16:00</b>	<b>B2116</b> <i>Artificial Intelligence Based Detection of COVID-19 Pneumonia Using CT Scan and X-ray Images: A Comparative study</i>	Muhammad Ilyas and Dalila Cherfi,
<b>16:00</b>	<b>S14206</b> <i>Sentiment Analysis based COVID-19 Vaccine Recommender System</i>	Areeba umair and Elio Masciari,
	<b>Closing Remarks</b>	

## The 10th International Workshop on High Performance Computing on Bioinformatics (HPCB)

Dec. 5<sup>th</sup>, 2023

Workshop Chairs: Yin-Te Tsai

Time	Title	Presenter/Author
9:00-9:20	Interpretable Diagnosis of Face Acne via Complementation Learning of Evidence Localization and Severity Level Grading	Zeming Zhang, Zhuoran Liu, Jingchi Jiang, Chaoran Kong, Yi Guan, Xiguang Liu, Haiyan You, Jing Yang, and Yi Lin
9:20-9:40	Disease Diagnosis based on Multiple Semantic Relationship Prompt Subgraph	Jing Xie, Xin Li, Ye Yuan, Yi Guan, Xitong Guo, and Yi Lin
9:40-10:00	Macular Holes Detection Using Deep Learning on Optical Coherence Tomography Images	Che-Lun Hung, Keng-Hung Lin, Yu-Kai Lee, Chun Hsien Lin, and Yin-Te Tsai
<b>Coffee Break</b>		
10:20-10:40	REAF: ROI Extraction and Adaptive Fusion for Breast Cancer Diagnosis in Ultrasound Images	Ziyang Zhang, Jiawei Lim, Yuanxun Zheng, Bozhao Chen, Dongxin Chen, and Yi Lin
10:40-11:00	Clarifying Confusion in Acne Severity Grading via Visualized Aggregation and Separation of Deep Representation	Zeming Zhang, Jingchi Jiang, Ruyue Dong, Chaoran Kong, Yi Guan, Xiguang Liu, Haiyan You, Jing Yang, and Yi Lin
11:00-11:20	Efficient Evidence-Based Dialogue System for Medical Diagnosis	Lian Yan, Yi Guan, Haotian Wang, Yi Lin, and Jingchi Jiang
11:20-11:40	Hybrid heuristics: for the repetition-free longest common subsequence problem with index-gene	Qichen Wang and Shu Zhang
11:40-12:00	Securing Fieldable Bioinformatics	Daniel Wyschogrod, Steven Murphy, Jake Beal, and Allison Taggart
12:00-12:20	Longest Order Conserved Repetition-free Subsequences	Shu Zhang, Qichen Wang, Daming Zhu, and Haitao Jiang
<b>Closing Remarks</b>		

## 2023 CBEAS WORKSHOP (BIBM 2023)

The workshop schedule is based on Istanbul Time December 5, 2023, Istanbul, Turkey

### CBEAS - Computational Biofilm Engineering and Applications workshop

Chair: Etienne Z. Gnimpieba

Time	Paper ID	Title	Presenter/Author
Session I		2 Speakers and 6 papers / abstracts	Session Chair: TBD
9:00 –10:00	Keynote Speaker #1:	TBD	
10:00-10:15	ID 1	PAPER 1	PRESENTER 1
10:15-10:30	ID 2	PAPER 2	PRESENTER 2
10:30-10:45	ID 3	PAPER 3	PRESENTER 3
10:45-11:00	<b>Coffee Break</b>		
11:00-11:15	ID 4	PAPER 4	PRESENTER 4
11:15-11:30	ID 5	PAPER 5	PRESENTER 5

11:30-11:45	ID 6	PAPER 6	PRESENTER 6
11:45-12:15	Keynote Speaker #2:	TBD	
12:15-02:00	<b>Lunch Break</b>		
<b>Session II</b>		<b>2 Speaker and 6 papers / abstracts</b>	<b>Session Chair: TBD</b>
02:00-03:00	Keynote Speaker #3	TBD	
03:00-03:15	ID 7	PAPER 7	PRESENTER 7
03:15- 03:30	ID 8	PAPER 8	PRESENTER 8
03:30- 03:45	ID 9	PAPER 9	PRESENTER 9
03:45-04:00	<b>Coffee Break</b>		
04:00-04:15	ID 10	PAPER 10	PRESENTER 10
04:15-04:30	ID 11	PAPER 11	PRESENTER 11
04:30-04:45	ID 12	PAPER 12	PRESENTER 12
04:45-05:15	Keynote Speaker #4	TBD	
<b>Closing Remarks</b>			

<b>Affective Computing and Health Care: new research and industrial perspectives</b>		
<i>Workshop Chairs:</i> <i>Dr. Daniela Cardone, Prof. Arcangelo Merla, Dr. David Perpetuini</i>		
<b>Time</b>	<b>Title</b>	<b>Presenter/Author</b>
<b>14.00-14.20</b>	<b>Welcome Presentation</b>	
14.20-14.40	Making The Implicit Explicit: Depression Detection in Web Across Posted Texts and Images	Pengwei Hu
14.40-15.00	Investigating The Generalizability of Physiological Characteristics of Anxiety	Emily Zhou
15.00-15.20	Probabilistic Performance Bounds for Evaluating Depression Models Given Noisy Self-Report Labels	Robert Rozanski
15.20-15.40	An Early Depression Detection Model on Social Media Using Emotional and Causal Features	Bo Xu
15.40-16.00	An Assistive Robot in Healthcare Scenarios Requiring Monitoring and Rules Regulation: Exploring Pepper Use Case	Sabrina Iarlori
<b>16.00-16.20</b>	<b>Coffee Break</b>	
16.20-16.40	Emotion Recognition By Facial Image Acquisition: Analysis and Experimentation of Solutions Based on Neural Networks and Robot Humanoid Pepper	Sabrina Iarlori
16.40-17.00	Multi-Channel CNN-Based Emotion Recognition Using Recurrence Plot Representations of Speech	Manolis Tsiknakis
17.00-17.20	A Two-Stream Channel Reconstruction and Feature Attention Network for EEG Emotion Recognition	Liyang Yang

17.20-17.40	Bio-Signal Based Multimodal Fusion With Bilinear Model for Emotion Recognition	Shrutika Sawant
17.40-18.00	Sentiment Analysis in Greek Clinical Conversations: A Comparative Study Of BERT, VADER, And Lexicon Approaches	Maria Evangelia Chatzimina
18.00-18.20	BiCCT: A Compact Convolutional Transformer For EEG Emotion Recognition	Liying Yang
<b>18.20-18.30</b>	<b>Closing Remarks</b>	

### 13<sup>th</sup> International Workshop on Biomedical and Health Informatics (BHI 2023)

Istanbul, Turkey

Thursday & Friday, December 7 & 8, 2023

\* *Tentative* schedule below is based on Istanbul Time, i.e. TRT

*Workshop Chairs: Bo Song, Jinli Zhang*

**Day 1 :** Thursday, December 7, 2023 (8:30 – 12:30 & 14:00 – 16:00) Room: MR15

Time (TRT)	Title	Presenter/Authors
8:30 – 9:00	<b>Opening &amp; Keynote Talk</b>	
9:00 – 9:20	B778 Empirical Analysis of Regularised Multi-Task Learning for Modelling Alzheimer's Disease Progression	Xulong Wang, Menghui Zhou, Yu Zhang, Kang Liu, Jun Qi, and Po Yang
9:20 – 9:40	B209 Surface-based morphometric changes of the hippocampus at global and subfield levels of early-stage Parkinson's disease	Meng Niu, Junqiang Lei, and Yu Fu
9:40 – 10:00	S23202 A Statistical Explainable Learning Model Optimizing Co-localization of Multidimensional Positivity Thresholds in Immunotherapy Decision-Supporting	Yixuan Wang, Jian Zhao, Quan Wang, Jingjing Liu, Jiayin Wang, and Xiaofeng Song
10:00 – 10:20	B1117 An Interaction Model for Merging Multi-Agent Argumentation in Shared Clinical Decision Making	Shengxin Hong, Liang Xiao, and Jianxia Chen
10:20 – 10:40	S23204 Designing a Multi-Stage Multi-Group Machine Learning Framework for Clinical Decision Support	Eva Lee, Fan Yuan, Barton Mann, and Brent Egan
	<b>Coffee Break (10min)</b>	
10:50 – 11:10	B2114 Contextualized Large Language Model-Based Architecture for Outcome Measure Alignment in Clinical Trials	Fatemeh Shah-Mohammadi and Joseph Finkelstein
11:10 – 11:30	B284 ChatICD: Prompt Learning for Few-shot ICD Coding through ChatGPT	Junping Liu, Shichen Yang, and Qiang Zhu
11:30 – 11:50	B435 Building Prediction Models for 30-Day Readmissions Among ICU Patients Using Both Structured and Unstructured Data in Electronic Health Records	Alex Moerschbacher and Zhe He
11:50 – 12:10	B2077 A Blockchain-Based Architecture for Interoperable Healthcare Data Exchange	Niranjan Sahi, Anda Liang, Sean McHale, Wyn Van Devanter, and Peng Zhang
12:10 – 12:30	B704 Patient-Centered Data Sharing and Revision Framework Based on Redactable Blockchain	Xingyu Wu, Liang Zhang, and Honglan Huang

	<b>Conference Lunch (12:30 – 14:00) @ Globe Restaurant</b>	
14:00 – 14:20	B880 Identification of Non-Lexical Content in Croatian Health Forum Entries	Amila Kugic, Stefan Schulz, and Markus Kreuzthaler
14:20 – 14:40	B445 Survey and Experiments on Biomedical Pre-Trained Language Models for Named Entity Recognition	Nooshin Bayat, Nuria García-Santa, Kendrick Cetina, and Ander Martínez
14:40 – 15:00	B1046 EGDE: A Framework for Bridging the Gap in Medical Zero-shot Relation Triplet Extraction	Jiayuan Su, Jian Zhang, Peng Peng, and Hongwei Wang
15:00 – 15:20	S23203 Latent Topic Extraction as a Source of Labeling in Natural Language Processing	Andrew Hornback, Yuanda Zhu, Monica Isgut, Wenqi Shi, Arjita Nema, Blake Anderson, and May Wang
15:20 – 16:40	B1118 Machine learning based system for the automation of systematic literature reviews	Radosław Pytlak, Barbara Bukhvalova, Pawel Cichosz, Bartłomiej Fajdek, Danica Grahek-Ogden, Bogdan Jastrzebski, Mehak Khan, Anis Yazidi, Jacek Postupolski, and Robert Waszkowski
15:40 – 16:00	B1066 Expanding Medical Knowledge: A Clinical Decision Support System Utilizing Literature	Zefang Tong, Liang Xiao, Jianxia Chen, Zhang Liu, Xiaorui Guo, and Pengfei Liu
	<b>Closing Remarks</b>	

<b>Day 2 : Friday, December 8, 2023 (10:00 – 12:00 &amp; 14:00 – 16:00) Room: MR20</b>		
<b>Time (TRT)</b>	<b>Title</b>	<b>Presenter/Author</b>
10:00 – 10:20	B310 Parsing Clinical Trial Eligibility Criteria for Cohort Query by a Multi-Input Multi-Output Sequence Labeling Model	Shubo Tian, Pengfei Yin, Hansi Zhang, Arslan Erdengasileng, Jiang Bian, and Zhe He
10:20 – 10:40	B2132 A dual-channel deep learning approach to continuous prediction of acute kidney injury in the intensive care unit	Xuetong Kong, Peng Zhang, Yunchao Ling, Daqing Lv, Jun Xu, and Guoqing Zhang
10:40 – 11:00	B1070 Pediatric Sepsis Phenotyping Using Vital Sign Trajectories	Yanyi Ding, Zhidi Luo, Mindy Szeto, Yuan Luo, and Lazaro Sanchez-Pinto
11:00 – 11:20	B476 Causal Effects of Environmental Exposures and Biological Traits on the Difference between Phenotypic and Chronological Ages	Daniele Pala, Yuezhi Xie, Jia Xu, Yuqin Zhang, and Li Shen
11:20 – 11:40	B733 Research on multimodal deep learning based on CNN and ViT for intrapartum fetal monitoring	Ling Xu, Guoqiang Wang, Zhen Cao, Qinqun Chen, Guiqing Liu, and Hang Wei
11:40 – 12:00	B1029 MEMS Gyroscope and the Ego-motion Estimation Information Fusion for the Low-Cost Freehand Ultrasound Scanner	Ayusha Abbas, Jeffrey Neasham, and Mohsen Naqvi
	<b>Conference Lunch (12:30 – 14:00) @ Globe Restaurant</b>	
14:00 – 14:20	B845 Cascade Decoding for Antibiotic Resistance Event Extraction Based on Contrastive Learning	Yanan Yao, Tian Yu, Huanghan Zhan, Weizhong Zhao, Tingting He, and Xingpeng Jiang
14:20 – 14:40	B2058 EndoDepthL: Lightweight Endoscopic Monocular Depth Estimation with CNN-Transformer	Yangke Li
14:40 – 15:00	B2061 Transformers for Detection of Distressed Cardiac Patients with an ICD Based on Danish Text Messages	Julie Dittmann Weimar Andersen, Marcus Lomstein Jensen, Uffe Kock Wiil, Søren Skovbakke, Ole Skov, Susanne S. Pedersen, Abdolrahman Peimankar, and Ali Ebrahimi
15:00 – 15:20	B557 AI-based Models to Predict the Heart Rate Using PPG and Accelerometer Signals During Physical Exercise	Lucas Ribeiro, Xiao Hu, Helder P. Oliveira, and Tania Pereira

15:20 – 16:40	B1035 HeartInsightify: Interpreting Longitudinal Heart Rate Data for Health Insights through Conformal Clustering	Prathamesh Dharangutte, Zongxing Xie, Jie Gao, Elinor Schoenfeld, Yindong Hua, and Fan Ye
15:40 – 16:00	S23201 Parameter sensitivity analysis of the myocardial cell models in ischemia and screening of drug targets	Jun Liu, Cuiping Liang, and Kuanquan Wang
Closing Remarks		

## 7th Edition of the Workshop on Processes and Algorithms for Healthcare and Life Quality Improvement

Workshop Chairs: Pierangelo Veltri, Patrizia Vizza and Raffaele Giacchetti

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Time	Title	Presenter/Author
14.15	Introduction to 7th Edition	Raffaele Giacchetti
14.30	<b>S17206:</b> Lung Cancer Detection via Federated Learning	Luciano Caroprese, Tommaso Ruga, Eugenio Vocaturo, and Ester Zumpano
14.45	<b>S17211:</b> Semantic Concept Recognition in Learning Brain by Using Deep Convolutional Networks	Liqian Sun, Jingheng Wang, Yiping Zhang, Di Zhu, Yupei Zhang, and Shuhui Liu
15.00	<b>S17202:</b> An Artificial Intelligence-Based Framework for Supporting Management of Patients Affected by Dementia	Pietro Hiram Guzzi and Pierangelo Veltri
15.15	<b>S17209:</b> Patch-based CNN Models for Bone Marrow Edema Detection Using MRI	André Gomes, Tania Pereira, Francisco Silva, Pedro Franco, Diogo Costa Carvalho, Sílvia Costa Dias, and Hélder P. Oliveira
15.30	<b>S17208:</b> Multitask learning approach for lung nodule segmentation and classification in CT images	Luis Fernandes and Helder P. Oliveira
15.45	<b>S17204:</b> An innovative platform to manage the access to social and health services for vulnerable people	Patrizia Vizza, Giuseppe Tradigo, Massimiliano Perri, Antonello Posterino, Raffaele Giacchetti, Pietro Hiram Guzzi, and Pierangelo Veltri
16.00 - 16:30	<b>Coffee Break</b>	
16.30	<b>S17207:</b> Revealing Brain Tumor with Federated Learning	Luciano Caroprese, Tommaso Ruga, Eugenio Vocaturo, and Ester Zumpano
16:45	<b>B1018:</b> CARDIOCARE platform: A beyond the state of the art approach for the management of elderly multimorbid patients with breast cancer therapy induced cardiac toxicity	Kostas Tsiouris, Georgia Karanasiou, Stelios Sfakianakis, George Manikis, Grigoris Kalliatakis, Athos Antoniadis, Lampros Lakkas, Davide Mauri, Ketti Mazzocco, Andri Papakonstantinou, Gerasimos Filippatos, Anastasia Constantinidou, Bostjan Šeruga, Constanza Conti, Anca Bucur, Elsa Pacella, Kostas Marias, Manolis Tsiknakis, and Dimitrios Fotiadis

17:00	<b>S17201:</b> Annotating omics Data with sex and age of samples: Enabling powerful omics studies	Pietro Hiram Guzzi, Raffaele Giancotti, Ugo Lomoio, Barbara Puccio, Patrizia Vizza, Giuseppe Tradigo, Pierangelo Veltri, and Mattia Cannistrà
17.15	<b>S17210:</b> Research on assessment of diabetic foot neuropathy based on multi-domain classification algorithm	Junjie Pan, FaMing Hu, Zhongliang Zhang, and Lin Shu
<b>17.30</b>	<b>Closing Remarks</b>	

## BIBM 2023 Posters at Istanbul

Poster ID	Accept Posters
P201	Anu Aggarwal, <i>Deciphering brain hubs and connectivity using EEG data</i> <b>Author Email(s):</b> aaagganu@gmail.com <b>Contact Person:</b> Anu Aggarwal <aaagganu@gmail.com>
P202	JunHwan Kwon, Kyeong Taek Oh, Jaesuk Kim, Oyun Kwon, Hee-Cheol Kang, and Sun K. Yoo, <i>Facial Emotion Recognition using Landmark coordinate features</i> <b>Author Email(s):</b> sunkyoo@yuhs.ac, kjh0442@yuhs.ac, okt2704@yuhs.ac, rlawotjr1207@yuhs.ac, KOY9303@yuhs.ac, KANGHC@yuhs.ac <b>Contact Person:</b> Sun K. Yoo <sunkyoo@yuhs.ac>
P203	KyeongTaek Oh, JunHwan Kwon, Oyun Kwon, Jaesuk Kim, Hee-Cheol Kang, and Sun K. Yoo, <i>Human Perception Mechanism based CNN-RNN Framework for Dimensional Emotion Recognition</i> <b>Author Email(s):</b> sunkyoo@yuhs.ac, okt2704@yuhs.ac, kjh0442@yuhs.ac, KOY9303@yuhs.ac, rlawotjr1207@yuhs.ac, KANGHC@yuhs.ac <b>Contact Person:</b> Sun K. Yoo <sunkyoo@yuhs.ac>
P204	Sehwan MOON, EunKyoung JEON, Aram Lee, Min Jhon, Ju-Wan Kim, and Jeong Eun Kim, <i>Challenge in Classification of Depressive Symptoms Using Actigraphy Data</i> <b>Author Email(s):</b> j.kim@etri.re.kr, sehwanmoon@etri.re.kr, ekjeon@etri.re.kr, al246@etri.re.kr, skyxmin@naver.com, tarot383@naver.com <b>Contact Person:</b> Jeong Eun Kim <j.kim@etri.re.kr>
P253	EunKyoung JEON, Sehwan MOON, Seihyoung Lee, Aram Lee, Sanghyun Kim, Kiwon Park, and Jeong Eun Kim, <i>A Comparative Study of AI Models for Depression Assessment using Voice Features</i> <b>Author Email(s):</b> ekjeon@etri.re.kr, sehwanmoon@etri.re.kr, seihyoung@etri.re.kr, al246@etri.re.kr, sh.kim@megaworks.ai, kw.park@megaworks.ai, j.kim@etri.re.kr <b>Contact Person:</b> EunKyoung JEON <ekjeon@etri.re.kr>
P254	Mohammad Asad, Abdullah Al-Refai, Saqr Abushattal, and Abedalrhman Alkhateeb, <i>The Epidemiology and Trends of Cancer in Jordan, 2012–2018</i> <b>Author Email(s):</b> mohdasaad94@gmail.com, a.alrefai@psut.edu.jo, Saqr.s.abushattal@ahu.edu.jo, aalkhate@lakeheadu.ca <b>Contact Person:</b> Mohammad Asad <mohdasaad94@gmail.com>
P256	Xupeng Kou, Hongcheng Xue, Yakun Yang, Longhe Wang, and Lin Li, <i>A Hounsfield Unit Grayscale Adaptive Segmentation Network for Kidney Tumor Surgery</i> <b>Author Email(s):</b> xupengkou@foxmail.com, xuehongc@foxmail.com, ykyang280740214@126.com, Phil.wang@cau.edu.cn, linli@126.com <b>Contact Person:</b> Xupeng Kou <xupengkou@foxmail.com>
P257	Xingzhong Zhao, Yucheng T. Yang, and Xing-Ming Zhao, <i>Prioritizing genes associated with brain disorders by leveraging enhancer-promoter interactions in diverse neural cells and tissues</i>



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P258	Beibei Zhang, Lishuang Li, and Qian Yang, <i>Automatic Large-scale Data Generation for Open-topic Biomedical Event Relation Extraction</i> <b>Author Email(s):</b> lilishuang314@163.com, lulu163163@163.com, qian.yang@valueonline.cn <b>Contact Person:</b> Lishuang Li <lilishuang314@163.com>
P259	Hang Thi Phuong Nguyen, Seoyeong Ko, and Hieyong Jeong, <i>Deep-learning-based Capillary Detection</i> <b>Author Email(s):</b> 208258@jnu.ac.kr, 175847@jnu.ac.kr, h.jeong@jnu.ac.kr <b>Contact Person:</b> Hang Thi Phuong Nguyen <208258@jnu.ac.kr>
P260	Congcong An, Yiwen Chen, Shanling Nie, and Hai Yang, <i>Joint Clustering and Analyze Single Cell Multi-omics Data by scMOGAN</i> <b>Author Email(s):</b> yanghai@ecust.edu.cn, y80210249@mail.ecust.edu.cn, e1123978@u.nus.edu, snie7802@uni.sydney.edu.au <b>Contact Person:</b> Hai Yang <yanghai@ecust.edu.cn>
P261	Sumi Sung, Ye Seul Bae, Youlim Kim, Jungkyun Woo, and Eui Kyu Chie, <i>Development of Remote Patient Monitoring System for Patients with COVID-19 Infection Based on the predictive Algorithms</i> <b>Author Email(s):</b> chellestin@gmail.com, byeye1313@gmail.com, dbfla2009@naver.com, ilye13@naver.com, ekchie93@snu.ac.kr <b>Contact Person:</b> Sumi Sung <chellestin@gmail.com>
P262	Sumi Sung, Su Hwan Kim, Youlim Kim, Ye Seul Bae, and Eui Kyu Chie, <i>Impact of Telehealth for Monitoring Depressive Symptom Trajectories in COVID-19 Patients with Clinically Mild Condition in South Korea: Longitudinal Data Analysis</i> <b>Author Email(s):</b> chellestin@gmail.com, suhwan@ualberta.ca, dbfla2009@naver.com, byeye1313@gmail.com, ekchie93@snu.ac.kr <b>Contact Person:</b> Sumi Sung <chellestin@gmail.com>
P263	Weiyang Chen and Ning Li, <i>Prediction of the Caenorhabditis elegans body posture and strains</i> <b>Author Email(s):</b> weiyangchen@yeah.net, mrsuccess888@163.com <b>Contact Person:</b> Weiyang Chen <weiyangchen@yeah.net>
P264	Chenhong Wang, Yujian Jin, Jiayi Liang, Yuhang Yang, Shanling Nie, and Hai Yang, <i>Modif-SegUnet: Innovatively Advancing Liver Cancer Diagnosis and Treatment through Efficient and Meaningful Segmentation of 3D Medical Images</i> <b>Author Email(s):</b> yanghai@ecust.edu.cn, 20001582@mail.ecust.edu.cn, 20003079@mail.ecust.edu.cn, 20001688@mail.ecust.edu.cn, 20000442@mail.ecust.edu.cn, snie7802@uni.sydney.edu.au <b>Contact Person:</b> Hai Yang <yanghai@ecust.edu.cn>
P266	ADVAITH NILA NARAYANAN, SHYAM SUNDAR DAS, and Mirmalinee T T, <i>Evaluation of AutoML Frameworks for Computational ADMET Screening in Drug Discovery &amp; Development</i> <b>Author Email(s):</b> ADVAITH2N@GMAIL.COM, mirmalineeett@ssn.edu.in <b>Contact Person:</b> ADVAITH NILA NARAYANAN <ADVAITH2N@GMAIL.COM>
P267	Corey Zhao, Emma Chen, and Tsute Chen, <i>Deep Learning Classification of Caries Based on DNA Sequences Transformed by Chaos Game Representation</i> <b>Author Email(s):</b> tchen@forsyth.org, coreyzhao999@gmail.com, emma_j_chen@brown.edu <b>Contact Person:</b> Tsute Chen <tchen@forsyth.org>
P268	Mohamad El-Hajj, Calin Anton, Cristina Anton, Dominic Dobosz, Iain Smith, Fattima Deiab, and Nagam Saleh, <i>Mining COVID-19 Data to Predict The Effect of Policies on Severity of Outbreaks</i> <b>Author Email(s):</b> antonc@macewan.ca, elhajjm@macewan.ca, popescuc@macewan.ca, doboszd@mymacewan.ca, smithi23@mymacewan.ca, deiabf@mymacewan.ca, salehn5@mymacewan.ca <b>Contact Person:</b> Calin Anton <antonc@macewan.ca>
P270	Guang Zheng, <i>Weakened and Imbalanced Gene Expression of Rheumatoid Arthritis Patients with Qi-Blood-Deficiency Syndrome</i> <b>Author Email(s):</b> forzhengguang@163.com <b>Contact Person:</b> Guang Zheng <forzhengguang@163.com>
P272	Bangning Ji and Gang He, <i>A Novel Diffusion-Model-Based Bone Scan Image inpainting Algorithm</i> <b>Author Email(s):</b> ganghe@swust.edu.cn, bnjcd@163.com <b>Contact Person:</b> Gang He <ganghe@swust.edu.cn>
P273	Charalambos Chrysostomou, <i>Deep Learning-Assisted Classification of Allergenic Proteins: An Exploration of Amino Acid Indices</i> <b>Author Email(s):</b> c.chrysostomou@cyi.ac.cy <b>Contact Person:</b> Charalambos Chrysostomou <c.chrysostomou@cyi.ac.cy>

P274	Charalambos Chrysostomou, <i>Deep Learning-based Phylogenetic Analysis of Influenza Protein Sequences: A Siamese Neural Network Approach</i> <b>Author Email(s):</b> c.chrysostomou@cyi.ac.cy <b>Contact Person:</b> Charalambos Chrysostomou <c.chrysostomou@cyi.ac.cy>
P275	Yan Wang and Ruyi Zhang, <i>Statistical Measurement Analysis of the Efficiency of Traditional Chinese Medicine Hospitals</i> <b>Author Email(s):</b> shuxuewy2016@hbtcn.edu.cn, 2231100803@stmail.hbtcn.edu.cn <b>Contact Person:</b> Yan Wang <shuxuewy2016@hbtcn.edu.cn>
P276	Qing Guo, Jie Yang, Yufeng Xiao, Huaqing Wang, Mangan Yu, Ying Wei, and Zhenlong Zhao, <i>A Joint Attention Module and Deformable Transformer Network for Hyperparathyroidism Detection</i> <b>Author Email(s):</b> hqwang@mail.buct.edu.cn, guoqing@mail.buct.edu.cn, yangjie970629@163.com, buct_yufengxiao@163.com, yma301@163.com, weiyang87331395@126.com, kudoukoumei@qq.com <b>Contact Person:</b> Huaqing Wang <hqwang@mail.buct.edu.cn>
P277	Yu Yan and Dongchen Jiang, <i>Multi-Task Learning for Suicide Risk Detection on Chinese Dialogue</i> <b>Author Email(s):</b> jiangdongchen@bjfu.edu.cn, yanyu99@bjfu.edu.cn <b>Contact Person:</b> Dongchen Jiang <jiangdongchen@bjfu.edu.cn>
P278	Pooya Moradian Zadeh and Deborah Sattler, <i>Improving Accessibility and Readability of Survey Reports in Digital Health Platforms using Conversational AI</i> <b>Author Email(s):</b> pooya@uwindsor.ca, deborah@deborahsattler.ca <b>Contact Person:</b> Pooya Moradian Zadeh <pooya@uwindsor.ca>
P279	Panagiotis Smyrlis, Konstantinos Vogklis, Tsakai Odysseas, Alexandros Tzallas, Nikolaos Giannakeas, and Markos Tsipouras, <i>A Novel Approach for Cancer Image Segmentation</i> <b>Author Email(s):</b> mtsipouras@uowm.gr, pan.smyrlis@gmail.com, voglis@ionio.gr, o.tsakai@gmail.gr, tzallas@uoi.gr, giannakeas@uoi.gr <b>Contact Person:</b> Markos Tsipouras <mtsipouras@uowm.gr>
P280	Odysseas Tsakai, Panagiotis Smyrlis, Nikolaos Katertsidis, Alexandros Tzallas, Nikolaos Giannakeas, and Markos Tsipouras, <i>Deep-in-Biopsies: AI-supported biopsy image processing for accurate pathology diagnosis and staging</i> <b>Author Email(s):</b> mtsipouras@uowm.gr, o.tsakai@gmail.com, pan.smyrlis@gmail.com, nkatertsidis@gmail.com, tzallas@uoi.gr, giannakeas@uoi.gr <b>Contact Person:</b> Markos Tsipouras <mtsipouras@uowm.gr>
P281	Zhenggui Xiang, <i>A Transformer-based Method for Recommending the Continuing Care Retirement Communities</i> <b>Author Email(s):</b> xiangzhenggui@outlook.com <b>Contact Person:</b> Zhenggui Xiang <xiangzhenggui@outlook.com>
P282	Jie Chen, Wenbin Liao, Du Wen, Jianqiang Li, and Fangzhong Wang, <i>Generative Positive-Unlabeled Classification for Hunting Small Open Reading Frames</i> <b>Author Email(s):</b> 921293150@qq.com, chenjie@szu.edu.cn <b>Contact Person:</b> Du Wen <921293150@qq.com>
P283	Zhenggui Xiang, <i>A Visit Prediction Method of the Patients in the Continuing Care Retirement Community</i> <b>Author Email(s):</b> xiangzhenggui@outlook.com <b>Contact Person:</b> Zhenggui Xiang <xiangzhenggui@outlook.com>
P286	Minchong Wu, Xiaoqing Lyu, Hongxiang Lin, Chenrui Zhang, and Sun Yu, <i>Enabling Large Language Models to Think Twice When Its Answer Is Unreliable: A Case Study In Cancer Screening</i> <b>Author Email(s):</b> mw4794@nyu.edu, lvxiaoqing@pku.edu.cn, linhongxiang@stu.pku.edu.cn, chenrui.zhang@pku.edu.cn, sunyu29@cnic.gt.cn <b>Contact Person:</b> Minchong Wu <mw4794@nyu.edu>
P287	Aref Smiley and Joseph Finkelstein, <i>Contactless iPPG Extraction Using Infrared Imaging</i> <b>Author Email(s):</b> aref.smiley@utah.edu, joseph.finkelstein@utah.edu <b>Contact Person:</b> Aref Smiley <aref.smiley@utah.edu>
P288	Aref Smiley and Joseph Finkelstein, <i>Exercise Exertion Levels Prediction</i> <b>Author Email(s):</b> aref.smiley@utah.edu, joseph.finkelstein@utah.edu <b>Contact Person:</b> Aref Smiley <aref.smiley@utah.edu>
P289	Qiwen Le, Yingchao Tang, Lanfang Dong, Derun Kong, and Aijiu Wu, <i>A Real-time, Multi-functional Intestinal Endoscopy AI Detection System</i> <b>Author Email(s):</b> lfdong@ustc.edu.cn, qiwenle@mail.ustc.edu.cn, tangyc314@mail.ustc.edu.cn, kongderun@ahmu.edu.cn, wuaijiu@gmail.com <b>Contact Person:</b> Lanfang Dong <lfdong@ustc.edu.cn>

P290	Vít Škrhák and David Hoksza, <i>Framework for Protein Structures Conformation Analysis</i> <b>Author Email(s):</b> vit.skrhak@matfyz.cuni.cz, david.hoksza@matfyz.cuni.cz <b>Contact Person:</b> Vít Škrhák <vit.skrhak@matfyz.cuni.cz>
P291	Utkars Jain and Prahlad Menon, <i>Classification of Abnormal Cardiac Rhythm from Brief Single-Lead ECG Recordings using Embeddings from Transformer Encoder Models</i> <b>Author Email(s):</b> UTJ1@pitt.edu, PRM44@pitt.edu <b>Contact Person:</b> Utkars Jain <UTJ1@pitt.edu>
P292	Xingyue Huo and Joseph Finkelstein, <i>Analyzing Diagnostic Discrepancies in Emergency Department Using the TriNetX Big Data</i> <b>Author Email(s):</b> xingyue.huo@utah.edu, joseph.finkelstein@utah.edu <b>Contact Person:</b> Xingyue Huo <xingyue.huo@utah.edu>
P293	Yingchao Tang, Puzhao Hu, Lanfang Dong, Meng Mao, Guoming Li, and Linxiang Tan, <i>A Multimodal Sentiment Analysis Method Based on Interactive Attention</i> <b>Author Email(s):</b> lfdong@ustc.edu.cn, tangyc314@mail.ustc.edu.cn, 1061788407@qq.com, melvinmaonn@cmbchina.com, lkm@cmbchina.com, tanlinxiang252@cmbchina.com <b>Contact Person:</b> Lanfang Dong <lfdong@ustc.edu.cn>
P294	Yafeng Ren and Zilin Wang, <i>A Tree-structured Neural Network Model for Joint Extraction of Adverse Drug Events</i> <b>Author Email(s):</b> renyafeng@whu.edu.cn, 2021050020@gdufs.edu.cn <b>Contact Person:</b> Yafeng Ren <renyafeng@whu.edu.cn>
P295	Younha Kim and Seungshik Kang, <i>Emotion Analysis in the Movie Script for Frozen Characters</i> <b>Author Email(s):</b> sskang@kookmin.ac.kr, hana01149@kookmin.ac.kr <b>Contact Person:</b> Seungshik Kang <sskang@kookmin.ac.kr>
P297	Wanting Cui and Joseph Finkelstein, <i>Prostate Cancer Prediction Using Healthcare Utilization Patterns</i> <b>Author Email(s):</b> u6048974@utah.edu, joseph.finkelstein@utah.edu <b>Contact Person:</b> Wanting Cui <u6048974@utah.edu>
P298	Changlin Liu, Gang He, and Zhengguo Chen, <i>Impact of FOSB on Tumor Microenvironment and Immunotherapy in Pan-Cancer</i> <b>Author Email(s):</b> ganghe@swust.edu.cn, 1003559653@qq.com, Maiwang342@163.com <b>Contact Person:</b> Gang He <ganghe@swust.edu.cn>
P299	Joongeun Choi and Hyeju Jang, <i>Topic and Sentiment Analysis of Reddit's Vaping-Cessation Community</i> <b>Author Email(s):</b> hyejuj@iu.edu, joon.choi2025@gmail.com <b>Contact Person:</b> Hyeju Jang <hyejuj@iu.edu>
P300	Mikyung Je, Myeongji Cho, and Hyeon S. Son, <i>Diversity and Evolution of RNA Recognition Motifs: A Case Study on the Utility of RdRp in the phylum Duplornaviricota</i> <b>Author Email(s):</b> hss2003@snu.ac.kr, jemi57@snu.ac.kr, yummy0112@snu.ac.kr <b>Contact Person:</b> Hyeon S. Son <hss2003@snu.ac.kr>
P301	Ke Wang, Wei Zhang, and Yong Liu, <i>A Transformer-based Multi-modal Joint Attention Fusion Model for Molecular Property Prediction</i> <b>Author Email(s):</b> liuyong123456@hlju.edu.cn, 2211883@s.hlju.edu.cn, zhangwei_jsj@hlju.edu.cn <b>Contact Person:</b> Yong Liu <liuyong123456@hlju.edu.cn>
P302	Wen Cheng, <i>A Graph Method for Predicting Protein-RNA Interaction Using Reduced Amino Acid Alphabets</i> <b>Author Email(s):</b> wcheng@saumag.edu <b>Contact Person:</b> Wen Cheng <wcheng@saumag.edu>

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